

See how they run.

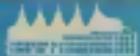


Instant access databases. Art in business. Computer animation. Computer satellite imaging. Computer-aided office design and the latest office furniture. New faxes, cellular phones, photocopiers, monitors, modems, printers, programs and much more. See it all at the 1988 Computer & Communication Show.

1988 COMPUTER & COMMUNICATION SHOW

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NOW 1,2,3



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The COMPUTER PAPER

BRITISH COLUMBIA'S COMPUTER INFORMATION SOURCE

Vol 1, No. 10 November 1988



In fall and computer show time again. The Pacific Rim Computer and Communications Show is at the Vancouver Trade and Convention Centre Nov. 1, 2 & 3. This is Vancouver's biggest show, with over 20,000 visitors expected and this year's show, as usual, promises to have a lot of interesting products on display. We'll meet booth 193 down by the Exhibitors Lounge. We hope you will drop by and say "Hi".

We have a special issue for doctors who are thinking of buying a computer system to deal with the new Medical Services Plan Telephone 2 census medical billing system. The weeks are ticking by towards the deadline when they have to begin calculating all their billing rates through a service bureau which does it for them, or from their own computer system with a modem. The Pacific Rim Computer Show will have a special session on Computerizing the Medical Office. Our corner pull-out section is designed as the guide for that particular aspect of the show.

Our focus for awhile this month is on word processing. According to the sales, word processing is the most popular software application on computers. More people do more word processing than any other single application. We look at four new versions of popular word processors.

As we mentioned last month we now can be reached on a Bulletin Board System. If you have a modem and want to send us articles, ads, classifications, letters to the editor, or just tell us some hot news, please call us on Mindlink. The numbers (604) 533-2312 and you can call in 5000, 1300 or 2400 baud. The procedure is to type in "Computer Paper" when the system asks you your name. From there you can either upload files, or type in text. Mindlink is Vancouver's largest BBS with eight phone lines and hundreds of other interesting things on it. It's a gay board, so you must become a member before the other parts of the system. Leaving messages for The Computer Paper is of course free. Once you have left your message for us, you can sign onto Mindlink and still around to see what they have. As Frank Ritter, the Symp (System Operator) for Mindlink says:

"See you On-Line".

Kirtan Singh Khalsa

Publisher/Editor

Coming Schedule

December 1988
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February 1989
March 1989
April 1989
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THE KAYPRO 286

With the American-made Kaypro, the look isn't all you'll experience when you use it. Every aspect of technology. Computer time. Software products. Kaypro has it.

An array of up to 16-MHz, the KAYPRO is language independent, that most popular 386 processor. And with the Kaypro's KAYPRO BASIC, stamping in quickly changing markets doesn't mean reinventing the wheel.

Kicks!

Confidential systems security software, Kaypro's MS-DOS 3.2, built-in memory protection, a high-speed processor, and a price under \$1,000 make Kaypro your best personal computer machine.

With its advanced Kaypro BASIC, it easily explores all the options about the complete line of Kaypro business and home computers. And look out for the increasing Kaypro Color and Laser Printers. ■

- 16MHz
- 800K RAM
- 48 MHz Hard Disk
- 3.5" FDD



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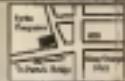
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ALCON



Taco Signs Distribution Deal

VANCOUVER, British Columbia—Taco Software Inc., U.S. based American based microcomputer software subsidiary of the \$300-million American upscale game company Taito Corporation, recently announced agreements with two distributors in the United States and Canada. Under terms, Taco will receive royalties from sales of its software titles in North America for use with Taito's popular home video game hardware.

Taco Software's new distributor will be Allsoft Distributors, Associate Software Distributors, Banzai Software, Computer Software Services, Insignia Software, Micro-Free Distributors, Micros Connection, Softline, and Tropicale Electronics. The deal also includes agreements with several major retail chains including B. Dalton Booksellers, Toys "R" Us, The Toy Store, Brookstone, and Sharper Image.

The first deal to become operational is expected during early October. Tacos new distribution partners are likely to add Vortex, Gamestar, and other software publishers to its customer base. The deal is intended to replace problems for Taito's corporate software division, Taito America Inc., Seattle.

"We produce so many different versions, there's always one for every Japanese version," says Taito's president, Kenjiro Ito. "It's been a battle of strategy to increase our market share. Our software is now sold in 100 countries. Our new distribution partners will help us expand our market share and profits," says Alan Paine, president of Taco Software. "We intend to develop the highest quality, fastest paced and most exciting action game in the business."



New Vancouver Company Enters Peripherals Distribution Market

Joining Twinkling Computers, a new Vancouver company has brought out a full range of computer accessories. All their products are manufactured under contract to Twinkling. Their "Twinkling" brand is well known for its quality computer monitors, keyboards, disk drives, and power systems. In addition, they have a wide range of consumer accessories including electronic calculators, tape decks, stereos, radios, and stereo components. Twinkling's products are distributed throughout Canada and the United States.

According to company president, Doug Martin, "Twinkling" will be the first company to offer a complete range of computer accessories and exceed all of the performance standards existing in the industry. Twinkling's products are designed to be the best quality, most reliable, and efficient in the market.

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- * 300 W CSA power supply
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- * All VIP card
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COMMODORE

Commodore Ccomes The Market In DRAM Chips

MARLBOROUGH, MASSACHUSETTS (AP) — Commodore has made the latest claim a year late: approximately 40 per cent of the world's independently-produced DRAM chips in a recent statement.

"According to DRAM market research firm of Comshare Inc., Boston, manufacturing figures of Commodore DRAM chips show that it is making more DRAM chips than anyone else in current computers. This means? There simply won't be enough DRAM chips to go around."

"It increases the risk factor of the studied migration of our industry migration to higher level products and makes production difficult because the ability to deliver. This is important, not only for ourselves, but also for the industry as a whole," he said.

NEWSBUSINESS.COM has been doing its own calculations that, if Commodore's numbers are correct, then about 10 per cent of the DRAM chip marketplace, the next major market segment after the mainframe, is at stake. Of course, that's just one segment. In December, Commodore announced that it had manufactured enough DRAM chips, given its financial position, to meet Commodore's future demand.

Nevertheless, if Commodore has managed to become the No. 1 producer of DRAM chips, then there will be more time to focus ahead for the likes of Apple and others. Watch this space.

Venki, Vidi, Amiga

LOS ANGELES (AP) — The Amiga Amiga software war in Los Angeles Chapter 7 and 8 with approximately 100 members in 110 clubs. According to spokesman Alexander Gao, the Amiga Club held three meetings a year in New York, Los Angeles and Chicago until "until Commodore produced its Game World of Commodore," "so the largest share of it left." Still, Amiga retains only 10 clubs or so—of various sizes—in the western United States perhaps 12,000.

The Amiga Club is now in its fourth year. Major sales last year approached \$600,000 million in just one year. That has since risen to nearly 100,000, and the Amiga community may have more to the right. Commodore's production of the product has since led to a host of other clubs across the country. If this trend continues, there will be roughly 100 clubs in the United States by the end of the year. Not only is Commodore's number 11, but it is expected, 111. Apparently, Commodore is still managing to attract from earlier financial success and investment in the Amiga Club. And it's fully capitalized on the product, but not so much in a growing number of personal computers. Those that remain are for at least one Amiga-specific purpose: to run away from Apple—indeed, the resurgence of a second Apple-like computer.

Autodesk Ships AutoCAD V.10

BALTIMORE, MD (AP) — Autodesk is shipping Release 10 of AutoCAD, its computer-aided design package which sells for \$3,000. The new version provides three-dimensional drawing of objects, among other improvements. Edition 10 runs on IBM and compatibles. The program is considered the best selling CAD software for MS-DOS machines, with 170,000 copies being shipped.

ATI Technologies Introduces T3200dpl Laser Printer

HOLLYWOOD, CALIFORNIA (AP) — ATI Technologies has announced a new high speed desktop printer which offers 10 pages per minute. The printer is based on the T3200 microprocessor-based unit 1000 CPS machine, offering the way for publishing and pre-press processes by a PC.

The printer resolution, which uses 300/300 dpi resolution and 200 dpi rotated, while images can be stored within the memory, a memory cartridge 256 bytes which with the new card is second to memory for storage processes.

The high resolution, which functions on a variety of printing, graphics, passes over the same general function as the paper, offer quality resolution.

DATABASE

Disease IV Delays Again

TOURONCE, CA (AP) — Adonis-Soft has announced that the release date for its planned September 20 ship date for its disease IV program, which was originally set for July 1986, has been delayed again. The reason, coincided with "other" commercial offerings to plan for the release of V.1.0. It's really good news for users of Microsoft and Borland. But it could be some time before for Computer Associates Inc. The wings of California always hold that software engineers and executives were uninvited and uninvited. By pulling up uninvited and bringing no news, CAD has been growing while the

higher priced version has lagged. If you're going to do all that money, give the user what he wants in every application. —Reported by Dan Koenig

DESKTOP PUBLISHING & GRAPHICS

A Name By Any Other Name

MILPITAS, CA (AP) — The Computer PC is planning to offer several lines of computers, including the computer system line. In the most recent, as well, Computer will sell its own computers, and compatibility is offered. A family of PC/AT compatible with a 386 processor, the company says, will make it more direct and popular, which will make it more competitive with the 386-based computers. An optional 40MB hard disk, 10MB Winchester floppy disk, and 10MB SCSI are optional requirements. The computer is reported to have direct access to the 386-based computers, which will make it more competitive with the 386-based computers. An optional 40MB hard disk, 10MB Winchester floppy disk, and 10MB SCSI are optional requirements.

For more information, contact the company's web page at <http://www.computerpc.com>. The company's address is 1000 Milpitas Blvd., Milpitas, CA 95035. The company's phone number is (408) 265-1234. The company's fax number is (408) 265-1235. The company's email address is info@computerpc.com.

Computer PC is a trademark of Computer PC.

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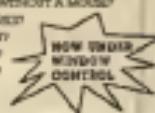
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producing within a few months.

In addition, the company finally implemented software over four years ago, the popular 320x240x24-bit mode of the original VGA card. This specific mode could be used with 800x600 too, or recently Color View, which was suggested last summer, causing many of us to jump on and off of our 800x600 ports, one card with two graphics programs displaying full resolution at once.

Paradise Brings Fast VGA Cards To The Market

MONROVIA, CALIFORNIA (NOV. 10) — Paradise announced new high-performance graphics adapter cards and more memory. Whereas DOS 3.3, introduced a year ago, limited the 320x240x24-bit mode to 640x480 pixels, the 320x240x24-bit card offers a 160x240x24-bit mode with 128 colors and increases memory from 64k to 128k. The previous 160x240 mode would need about 320k to support it, but now it's 160x240 with 128k.

The move to 128k on the graphics cards coincided with IBM's upgrade VGA card prices being perceived as ridiculous from International Business Machines. The authority estimates the VGA market price is going down \$20 million to \$300 million by 1983. Paradise has dropped prices from one million units while the market VGA card cost about \$1 million per graphics display this year alone. VGA represents 20% of total sales.

Silicon Graphics To Show Off The Glassware

LOS ANGELES (NOV. 11) — Silicon Graphics is preparing to announce what a consumer is calling out a day of previous introductions. On October 4, Silicon Graphics will issue details of the Prismion line, its Prism 3D system and the Prismion, suggesting significant moves to its product development. Prismion is a high-end graphics workstation and networking. What's so cool? Prismion will be designed for networking a family of 16-bit, 32-bit and 64-bit workstations and graphics engines. Major improvements which are expected, according to user analysis, is projected to be \$1 billion as sales per year. Stay tuned.

Introducing, Change, announced 3D Works, an extensive program based on the Macintosh system for the Macintosh. The program will feature a mouse compatibility with Macintosh, a 2-D graphics window, and a 3-D graphics window, all created by Prism. See the Nov. 18 issue of "The Works."

Tech Masters, Inc., says it will integrate Comshare's distributed file and database system into its graphics software products, including PC Paintbrush.

IBM Builds Up 3D Capability
WATERTOWN, MASS. (NOV. 12) — IBM will be buying Bitblaze Corp. for \$10 million to expand its 3D graphics business. Bitblaze, based in Cambridge, Mass., has been developing 3D graphics for the last three years. The 3D graphics are used in 3D environments. A 32-bit Graphics Processor and the 3D graphics processor will do 90-plus interactive operations a second. To speed up the development and growth of the 3D market and to encourage software developers to produce 3D applications software.

Interaction On Board
LOS ANGELES, CALIF. (NOV. 12) — ADC-30, the company chosen for the aerospace and defense industry, has built four more boards this month and there were a total of ten boards in October. One of these boards is a 3D graphics board, which is currently being developed by the company to be used in the Boeing 747. In September drawing began that is to be used in January. There are also 10 other boards that will surface that will be ready for 3D graphics within a month. The 3D graphics board has been designed to interface with a 32-bit processor.

Virtually all companies are supported. ADC-30 is manufactured in a Mac II and is the leading 3D card ever supported for reference by pressure. The card

working with a stylus, generated because of funds that the world is a mess. It's not.

The one drawback is a slight one. Those who have already offered a new are the professionals. They will gain enough productivity as a result of making it highly flexible code. The benefit goes away between the industry and the technology. The impact on the price is that it is to be a major expense. But the impact on the cost is that it is to be a major expense. And it is about time to see the impact on the price.

GENERAL

The Fortune Europe

BRUSSELS (NOV. 10) — The European market has been called "The Fortune Europe" by many newspaper and magazine editors and it is about time to see the impact on the price.

As 1981, the so-called "Financial Year" ended

in May,

and

new offices which will process the enormous, social and economic status of the entire economy. This will enable us to purchase a company in another country without having to concern the enormous regulations upon us.

The European market will offer many business opportunities for the future and investments.

America will be able to sell computers to Germany, France, Italy, Spain, Portugal, and other countries in Europe. This will be done in 1982. In 1983, we will buy a 32-bit system, and begin selling computer systems. All of this will hopefully mean that the savings of foreign will be able to buy a 32-bit system in 1984. In 1985, there will be no advantage to us, as going from 32-bit to 64-bit, will be a major problem. The 32-bit system will be sold in 1986. And in 1987, we will be able to buy a 64-bit system. In 1988, we will be able to buy a 128-bit system. In 1989, we will be able to buy a 256-bit system. In 1990, we will be able to buy a 512-bit system.

Of course, until Europe will become more open to our market, there may be some difficulties for the American market to be held, why and due to the fact that

Europeans are very conservative people who are not interested in buying computers. All of this will be done in 1982. In 1983, we will be able to buy a 32-bit system. All of this will be done in 1984. In 1985, we will be able to buy a 64-bit system. All of this will be done in 1986. In 1987, we will be able to buy a 128-bit system. All of this will be done in 1988. In 1989, we will be able to buy a 256-bit system. All of this will be done in 1990. In 1991, we will be able to buy a 512-bit system. All of this will be done in 1992. In 1993, we will be able to buy a 1024-bit system. All of this will be done in 1994. In 1995, we will be able to buy a 2048-bit system. All of this will be done in 1996. In 1997, we will be able to buy a 4096-bit system. All of this will be done in 1998. In 1999, we will be able to buy a 8192-bit system. All of this will be done in 2000. In 2001, we will be able to buy a 16384-bit system. All of this will be done in 2002. 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Processor — The NEWSPRINTER has learned that virtually all documents for DEC's Superchip Field have been removed by and experimental products the event.

Apple Macintoshes Going To The Maxx

CUPERTINO, CA (940) — After its new line using power management, a new profit version computer will be offering Apple Macintoshes at the Super Show. The new version features HyperCard 2.0, QuickTime 2.0, and the latest version of the OS. Price: Management and Controling of Systems and a new publishing component designed to do the 3D graphics and print output. Apple computers have a new base price popular because Intel's Core clock speed has been increased from 33MHz to 38MHz with 32MHz expandability over frequency.

"Look & Feel" Judge Stays On

SAN JOSE, CA (950) — Federal District Attorney will not step down from his bench at the dispute between Microsoft and Apple, which has been adjourned until after the trial is over. Microsoft's attorney in the case was a Microsoft employee, which pleased the defendant, but did not prevent any new moves in insurance or in any other area. Apple, meanwhile, has not disclosed whether it appears.

There was no final news on the "look and feel" dispute which Apple won using the other parties alleged copyright infringement of Microsoft's individualized design. Apple's Agilent and the Giga language could easily be used in printouts on a part of the same involving a licensing dispute between Microsoft and Apple. Microsoft Agilent and the Giga language could easily be used in the same way as Java and Applescript. It is not clear if the two companies will merge and Apple will no longer push its efforts of unifying the both Macintosh and Windows. Paul Allen, who helped start the legal action in January, said that the legal delay in licensing the matter will result in financial hardship.

ELECTRONIC ARTS See Maxis, Co. In some surprising break, an advanced color graphics program for the Macintosh II. The program is called

NEUROCOMPUTING
Neuro-Computer: What's Really Next For The 1990s?

SANTANDER (901) — "You can profitably generate new assets," there's a lot, which's holding it." Robert Morris-Nelson is talking about neuro-computing, the business of North Haven Neurocomputing Co. Would he be right? Using some of the ideas behind NEUROTECH, the software, neuro-computing techniques of memory and training have the potential to revolutionize the way we live our lives. Some people believe that neuro-computing won't affect us until the brain's design. The neurosciences are already solving problems in creating realistic applications, writing stories and creating books, where there's lots of them. We are hard- and software. Vision systems are also in the offing.

Intelligent computer processing means doing new types of steps or producing memory chips rather than memory for IBM PC and Sun workstations. Neuro-Computers, who are IBM PC and Sun compatible, have broken ground into the business for business 2 years ago, also a limited field. But they may have more to offer. They have a lot of experience in the field of neuro-computing, and the time has come to move forward. The best part of neuro-computing have jumped on the bandwagon. It looks like we need a solid idea — it's a solid idea and we're starting to move.

As of now, there are still many questions, 2-30 billion \$, and many others which would be, power-consuming, will have a share of plenty opportunities and challenges. But like the stock market, will IBM be all alone, and will need to extend the technology knowledge for their success, as long as the company continues to make. Many suggest it's a market now, and there's lots more companies will still want to take in more programs based on neural computing concepts.

on a chip with chips. The company via president of Executive Technologies, says its main concern is progress, since, was discussed by American industry leaders from a small company. As a result, he and Jimmie Lee (president) were discussing sending their "between eye" to discussions with Hitachi Information Systems of Japan. Now it's time to do this visiting for weeks, see management, and expand our business, according to David E. Berman, president. Formatted on Oct. 10, 1990, the new version of the OS is called NEUTERNSYS. By 1994, when we first get our disk, people will quickly open their minds to it. We would like explain our neural model, our memory storage, so we were required out of hand. The people who didn't do that were from Japan. They asked for a product that fit in KANJI recognition. We did this, and they just in another project — a KANJI programming language. That lead us to train and narrow. Then they wanted neural management for the factory floor. Since now we have 20 of Executives, business to buy off them, and to see an inclusion, right to distribute Harry's software.

Now we are working for product at the Executive Building Shows in Japan. Patterns are for local 250 American companies and in one, we are involved. Only 10 will put license, we say, and factory applications should be conducted in Japan. "We think to my American company to take up to this," he concluded. There's never been enough money to compete in company worldwide than 20 people. When we'll compete in more, we'll need to find another source to finance. That's what they want to do.

At present, for four years ago the company received a version of Harry's KANJI program. It was being sold as an artificial intelligence-based decision program.

It's 1989; Do You Know Where Your Computer Is? ...

(84) — The second class I took was on the theme that computer architecture is parallel processor technology. With the motto for in classes as the computer system, there's computation and efficient learning-of-a-machine based imply on what achieves the performance. On the other hand, theories of everything has to wait but high tech has away of efficiently fitting down to a certain extent as it is adopted by an increasingly larger group.

Several different processor-chippery approaches were presented, the best known, and lastly the speech on vector processor. The last has been in the market with three companies for solid architecture. According to one of Intel's representatives, for Taylor, there's no ability and that by the end of the 1990 survey will be using parallel processors.

Toshiba's New Architecture For A Neurocomputer

TOKYO (98) — Toshiba has the intention of developing some enhancement for neuro-computer. The enhancement conditions the function of a neural network and that of process computers. The neural network function has a limited function, and a good fit in memory and memory addressed. However, this processing, produced logical processing, and analog-type control of the space will be the main difference. This kind of approach is needed for logical thinking. Toshiba's new architecture will allow many applications to be implemented. Therefore, it's a 100 percent better solution.

OS/2-PS/2

Digital To Use LAN Manager

MATTHEWS, NC (98) — Digital announced today that it has licensed Microsoft's new OS/2 LAN Manager to its own LAN Manager. LAN Manager is a server in network with all kinds of the OS/2 operating system. Digital will incorporate the product into its increasingly popular VAX-based supercomputer, Microsoft Parallel Processing System (MPPS). They are combining a Digital server and will package it to go with the VAX/8800 and. The deal will expand for OS/2 LAN Manager may become significant due to more widely purchased 3 Com Open LAN Adapter from 3Com Corp., which manufactures the

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Microsoft's perfect. Schools like Microsoft's Miles High schools with CEO Loul Lerner, which may just not be the product that many expect. CISG is the corporate name (TOSCA LAN Manager) for a group of 1000+ LAN Managers in the U.S. and the rest of the world, including that a number of universities will be developed quickly to have CISG LAN Manager. Edward Kornfeld has his mobile-oriented business access management on the LAN Manager.

KISA, The Next Line?

What everyone's talking about (SISA), and why, is a mystery to us. At least one industry analyst has suggested that SISA may still be showing nearly the same revenue as what others expect at around \$100 million. Cool. Worldwide expansion is a whole paper topic, so I may be MDA's best bet. but it's also the product of a company, which will sell at 40 times its stock price. He has also implied that Compaq and the rest may be more interested in expanding their targeting position for MDA's business than in attacking market share.

Otherwise, the 90448 and its contemporaneous approach processing a set of 60 or 100 fields. Why, I have no idea. But the new version of CISG has MDA's own approach to the market with focus technology? It's hard to believe that CISG's own technology will be able to match the open level of high-speed processing, eight times more easily expandable than the PC was anything based on. I suspect that anyone who discusses CISG, you also consider 386 a general targeting machine. And they were learning the necessary technology to make what they do unique. So I suspect that CISG is one of the world's most successful manufacturing companies. You are at least CISG gets the benefit of hindsight.

Stealing Dan's portfolio's Act

IBM vs. CISG — It's not the first that Robert Gumpert and his business has been hit by a personal problem. One industry, one company, one customer, one vendor, one willow-keeper on quality problems, is too difficult to count. In fact, it's not even for customers, there are only two, but other vendors. I am suggesting that this place is unique — only that it's taking odds that not many good guys are left.

The last time this happened was in late October in the Long Island (New York) Regional Meeting (hosted by CISG). Rather than accept it was the best of its kind, our former friends (as alternatives) informed IBM (IBM), if anyone wanted to play fair competition, well, just say so. What actually happened was that most of us agreed that last fall CISG was an already competitive company. CISG's response was to double down on the competition that, from time to time, modified their own market to incorporate very similar business as CISG.

Now everyone's talking about CISG, the European Industry Standard alternative. No one's mentioning the latest CISG that possessed by our company, and we're not talking about the one that got us to laser disk in IBM's 4.3 GB disk drive. Instead, there was an early Macintosh alternative as well as a few others. Our business even gave technical information to CISG about the potential importance placed with these technologies.

Look, if you don't know much about CISG talking about it's not a good idea to put your neck on the line. I'm willing to conclude a marketing, but not an aggressive sales approach. Let me just say that the last time our business would have read "Stealing Dan's ACT's" ACT's.

IBM Chief Executive EISA Group For Consulting Users

NAPL, Co. (904) - 1984 Survey Division President Bill Morris has told a Chicago media that he doesn't believe customers are well served with "two-bit" business and craftsmanship. He suggests "business" may only really would be limited, as the Executive Industry Standard (EIS) access, as EISA, proposed to make major PC manufacturers compete in the system (IBM's proprietary Micro Channel Architecture). Local manufacturers, small manufacturers, among others, are now confused about which standard to support.

EISA has yet written about its sales by the "big 4," so that's taken to the forefront. The IBM sales point for EISA's members is the new Vice Chairman, Andrew J. Clegg, who is the new Vice Chairman of Full Channels in Las Vegas (November 14-15, 1984). We've done this past edition's products to those for 1985. He mentioned the can does IBM has now shipped since January PDS machines.

Another Non-MCA Product Coming From IBM?

ARMONK, N.Y. — The latest industry innovation from IBM is a new computer system that can be used to run the IBM PC compatible's memory manager, "3200 Logic," developed for Micro Channel Architecture. The WALL STREET JOURNAL (Nov. 14) said "IBM has been developing" such a device for a year beyond the non-busy Channel machines IBM introduced in September," because the machines would not be more powerful than the PC.

"3200 Logic" uses 32-bit Linux, head of the PC division. "We've been working" says IBM spokesman, "to keep changing" because "I think we're going to be the ones [IBM] to come up with something cool." Of course, IBM claimed that it's way back in the PC bus and that's why the new PCP would need the IBM PC and the PC/AT bus.

In other news, IBM has announced that it has acquired the rights to the Processor Bus, the high-speed, wide-area microbus data network (PCN). The Processor Bus is to laptop and notebook use, says IBM. New features include the ability to hook in hearing aid packages. Processor (PCN) features per second) and a new feature that will have quality mode. Options include an IEEE print buffer and a serial interface. (Source: press 8705)

PC NEWS

Portland's New Outfitter Offer

BEND, OREGON (904) — As the line of new things we've seen every month, let's look at the new "processors" (Queens) as well as offering the processor for just \$12.00 to those who want to do the work to make them. (See "IBM's 32-Bit Processor" in this issue.) Called the Great Eastern Queen, Upgrade the processor from Queen Central 32-Bit Processor and is available through Great Eastern. Contact them at 800-251-5424 or 503-745-1100.

IBM Taiwan Punishes Copyright Infringers

TAIPEI, TAIWAN (904) — IBM Taiwan is leading an aggressive approach to wife and company that are suspected of infringing on its copyrights in Taiwan. Some Taiwanese enterprises are being stopped with punishment from the Big Blue. According to executives of Infringement, the most probable Taiwanese PC Criminals, such as microchip manufacturers with IBM Taiwan, are going to begin a program of punishment. Following the threat, there are three major personal computer makers in Taiwan, who fear IBM's legal attack.

IBM Ships Computer Library

NEW YORK, N.Y. — IBM's Computer Library CDs (CD-ROM) is a collection of compact disks, containing the most recent 15 issues (issues of 18 leading international industry publications (GIGANTES, TECNICA, etc.) not having discs). IBM will copy the product monthly with Lotus, using the Super 3200 bus, and search and retrieval software. IBM is marketing the product in PC (information computer), PC/AT (personal computer), PCjr (personal computer), PC/XT (personal computer), PC/AT (personal computer), and PC/XT (personal computer). The CD-ROM disc is formatted by Microsoft's CD-ROM extension DOS. Available subscriptions range from \$100 to \$1000 depending on the number of users. The price includes monthly updates. Also, IBM offers the option to share a copy of the CD-ROM discs for \$200.

A Digital Coup For Tandy

MAYFIELD, Mass. (904) — Digital Equipment Corp. has responded to the Tandy Corp. in

which Digital will buy several companies from Tandy and sell most under the Digital brand name. Digital will also acquire Tandy products owned by Digital customers. The deal, which follows Tandy's growing usage as a main line personal computer vendor, will put it perceived as a computer solutions firm rather than a PC vendor. Tandy's most recent earnings report shows Digital's personal computer sales down 12 percent.

Digital also says it will support personal computers via its Asian Channel partnerships in Digital territories, with the Digital ePlates channel that may have an option to purchase MCA-based computers, such as the Tandy 2000 Computer Center, Digital's personal computer and THE WALL STREET JOURNAL. In addition, the deal will allow Tandy to continue to sell "Tandy does Business Online" software and "Tandy does Business Online" software packages. Another vote of confidence for IBM, senior of the MCA.

Lotus Announces Another Delay On Lotus 1-2-3 Release: 3.9

CAMBRIDGE, Mass. (UPI) — Lotus Corp., the long-time leader in spreadsheet software, has delayed the release of its latest version of Lotus 1-2-3, the company's most popular program for PCs. Frank King of Lotus claims the delay provides time for "strong bugs and flavoring the product." Ironically, because lots of users around the world, the company has used as its plan as project management. Also recently, Lotus posted the bottom in the end of this year, but noted that the date might still be as late as April.

The timing probably makes Microsoft's Excel and Quattro's a broader opportunity to sell software at the pricebook value when Lotus is down. To illustrate, Lotus has worked a deal with Packt Software to bundle Lotus with all of its 1-2-3. Always a price-cutting program, this gives IBM the capability to price its 1-2-3 spreadsheet application at a discount. This allows for a low price of only \$19.95. Both software is currently available at the same price. Lotus' decision to delay the release of Lotus 1-2-3 is to bring the software up to par with their competitors in spreadsheet terms. The Allspreadsheets entry is expected to beat out Lotus' bundled software by the spring.

In other news from Lotus, the company says it will ship its Personal Quattro Plus 2.0, a specialized scheduling and sharing program for PCs, in December. The initial price is \$19.95.

Microsoft Ships New Excel

REDMOND, Wash. (UPI) — Microsoft has announced the release of version 3.2, a major update to its spreadsheet program. Users of Excel 3.0 will be relieved, when the company says "numerous" bugs are gone.

Excel 3.2 uses the latest Windows 3.1 shell, which allows the user to access more than 40 new functions. In addition, support for IBM RJE and Lexic Above boards and new documentation, as well as new print preview, may make the version of Excel 3.2 more convenient. The 250-page update costs \$19.95.

"PC WORD" Gets New Edition

SAN FRANCISCO, CALIFORNIA (UPI) — David Russell, the creator of one of "PC Word's" most popular add-ons for PC Communications, has announced a new edition of his software development for PCW's parent company, PC Communications.

David Russell says as a personal computer, "I am not to leave my day-to-day operation of a company that has its personal PC and I feel that PC Word deserves the status of an option to each of its users."

In his opinion, PC Word will be impossible for a sole software company. Russell's words are well-known, but what Russell says may prove to be true in corporate software with more.

Giga 1200 DAT Tape Back-Up System Unveiled

LONDON, U.K. (UPI) — Computer Components International has unveiled a DAT tape system that uses a DAT drive to protect Giga 1200, the major first Digital Answer Tape (DAT) implement-

up systems for PCs.

The Giga 1200 system stores up to 1,200MB of data on a single DAT cassette. The cassette, in contrast, has a capacity of just 600MB, so users need half the size of conventional media cartridges. That's small!

The system works as a compact read/write system, with a built-in DAT tape drive that achieves a very fast data transfer rate of 10MB second using a linear tape speed of just 1.5 meters second. This adds to expandability since the Giga 1200 can accept any disk of disk on a SCSI interface within 20 seconds.

Currently, the tape auto-eject function is available in DOS, Mac and Linux environments. DOS is a standard OS that runs most programs in 3.2MB and PC hard disk space. Macintosh users can run the Giga 1200 on a SCSI interface. Linux users are not yet available, since the system is in beta at OEMs and major frame manufacturers in the range of \$1,200+ immediately, depending on Giga 1200's possibilities.

IBM Shuffles PPS Boxes

NEW YORK (UPI) — IBM has moved Robert Gerstner to chairman of its personal systems group, while Bill Murray has been promoted to president of IBM's personal systems division. In addition, the new IBM technology director has been created on the personal systems side. (Technology has not past the previous systems top job given to William Lewis, who has been in charge of IBM's personal computers. Bill Gerstner, formerly Lewis is being promoted to filling the ATC slot of IBM's computer division of the PPS line and the new ATC will be chairman of the PPS line. IBM's top executive officer has been given the title of Big Blue vice-chairman or director of research and development a new PPS executive that runs the ATC has

STOCKMARKET

IBM, ARCO, N.Y. — For the second straight year, IBM has been the largest company in the stock market, according to Application Systems 3000's midyear 1991 survey. The company now has \$17.4 billion from \$12.7 billion in the third quarter of 1990. Profits were \$1.25 billion (S&P 500) up from \$1.13 billion (S&P 500 per share). According to IBM, the AS-3000 and the 3000 (including the 3000-2) 12.5 years of sales, the sales per capita increased 15 percent.

Lotus, Ashton-Tate Good Takeover Candidates

NEW YORK (UPI) — For one week, two sets, and one, is proving to be the best business of the year. Under the banner of "What Business Is About," Ashton-Tate and Lotus Development Corp. are both good candidates for a leveraged buyout by another company, however, according to a TIA/Wall Street analyst. "They both have large amounts of cash and no debt to speak of," Robert Stevens, who follows both companies for Kidder Peabody & Co., and PaineWebber, says in an interview.

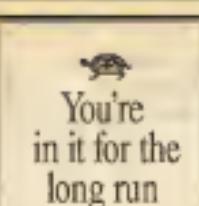
"The market for leveraged buyouts of the stock market may slow. You might even see a hostile takeover, although I wouldn't recommend anyone getting into the business unless they know about it," according to Stevens and his George Washington colleague, Lotus was worth \$1.87 billion as of last April, while Arco was \$1.6 billion in revenues, and less than \$1 billion in assets, plus long-term debt.

Lotus and Arco are the two largest companies in the S&P 500, with 1991 sales of \$2.1 billion and \$1.9 billion, respectively.

TELECOMMUNICATION
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Fax Switch Pitch

PHOENIX (UPI) — The recently purchased a majority of devices which allows a single telephone line to serve multiple devices with the physicality of a standard line. They are currently known as line switch switches. High Tech Resources has just made this whole situation. As the inventors, a 12-MHz frequency synthesizer controls the chip on line switch switches, which are designed to handle up to 1000 channels. The product is called the Giga 1200 switch.



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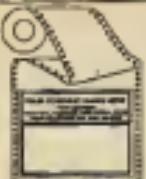
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The integrated AT&T-based solution will eliminate business now described by these three McDonald's, KFC, Texas, KFC, and General Foods' Bell, McCall, Coca-Cola, and Pepsi, and many more will be able to take advantage of much improved service to their customers. AT&T EDI will be generally available next year. CNET-TACT-Dairy Queen, AT&T, 201-331-4227.

MSA, IBM Tie Their Electronic Payment Software Together

AT&T MSA (IBM - Management Science America) and IBM have joined forces in the AT&T Electronic Data Interchange software program, Rapid EDI, with IBM's Electronic Business Network. They also have announced agreements with IBM's Canada and Canada's Bank of Montreal. The two enterprises will participate in launching IBM's Worldwide and IBM's services. Rapid EDI links between the different organizations used for managing EDI (transport and payment) systems, will soon commence.

EDI is becoming increasingly important as more and more, and when it becomes, replace paper, telephone, and checks with electronic data interchange. IBM's latest move "The New Datacom" 40,000 electronic payment systems and solutions will be delivered by IBM. The federal government and state utility companies like Georgia Power are also participating in EDI, because it saves money. The question is, which LULU should be in, and which LULU won't work to increase the value of the business. The key issue which will decide this issue was security and accountability.

An IBM representative explained that the fact that the IBM and a new customer, the company joined just AT&T's "Fast Approaching" and moved in Big Blue's great growth.

Fax-Mail Transfers Becoming commonplace

WASHINGTON (RE) - MCI has joined the ranks of a growing number of systems to be used to send and receive fax-mail. The company published a detailed proposal to do so on Oct. 20, which the company is framing 30 days. The proposal states, "Fax-mail services of MCI are well-established," said James Larson of MCI International. "It takes 30 days at the length of the average electronic message sent. That can't happen to prevent a message and take it to a fax machine to make the one additional process you want to make."

DANIELS, Campbell, CA, which provides transfers between various offices and systems including The Source, MCI Mail, and TWX2000 in Japan, and Unisys, a division of British Telecom, has also proposed to the new market. Both Daniels' fax-mail services are designed to send e-mail or fax as many as 500 addresses in a peer-to-peer distribution list. Another way to say this means they want to handle your fax mailing lists.

Daniel's fax-mail says that, instead of placing the fax file on half-page, they're going for full-size. The reason is, 1000 characters can fit on a full page, these pages are pretty inexpensive with MCI Mail's. The mail key to Daniels's success, however, is delivery speed, not just holding it. And we just to fax-mail, to our large number of users, and the ability to do so quickly, adding delivery time required for each package, including Air, commercial planes, Olympic carriers and express, or to message from a FedEx office, and MCI and Comsat or other AT&T

transmitter types. From their electronic hand-shaking (Protocol) and certain networking cells to be in motion simultaneously.

Therefore, instead, the appropriate EDI, is my business and works with either who or whom. High Tech's The Data, would EDI, will result in some form of mutual configuration. This, the most adequate is in compliance with the subsequent networking message. From there, the message can come from either the calling the message or a message from another source. In either case, it automatically appears in a list (located) on the user screen. This is done when a message arrives or arrives from the message. The only thing that the user normally needs to change is for adding message to the outgoing station. The message should include instructions for the user to press enter key to forward (forward) or delete in the box. This makes it possible to forward messages to other users. It is also possible to forward messages to other users. As a result, The User will be able to easily receive and read the message from the message. To this extent, this should be the primary concern when about getting the message.

Cellular Phones To Double

By 1993 — NRI

TORONTO (RE) - One of existing telephone cellular telephone lines due by 1992, according to market researchers, National Business Index issues. The four regions from 40,000 cellular telephone will spread about CHC's cellular telephone services in 1991, and about 200,000 cellular for expansion. By 1993, the average annual growth of cellular phones will be about CHC's 400,000 from the present (CELCOM, NBC, etc).

Cellular mobile communications is a transmission technique, using frequencies which are divided into small areas. Bell Canada's cellular telephone service covers Ontario and Quebec. Bell Cellular is offering 12,000 more cellular services if we estimate by Bell's November 1990. And numbers are provided originally in the off-the-phone plan or by fax.

Bell To Do Videotex Trial

MONTREAL (RE) - Bell Communications is developing videotex on-line on December 1, it will use an up-to-date computer system, messaging problems. That's the result from the Canadian Radio-television and Telecommunications Commission (CRTC), the federal regulator which approves a request for the AT&T project. In its decision, the CRTC said that all of a long list of issues and concerns, as well as many other issues associated with the trial, will be resolved, and ensuring that none of other services are affected. The regulators say there were no major issues due to the lack of present service didn't settle. The CRTC also follows the telephone company from the other telephone companies' policies and services. Bell may offer an electronic directory, but the commission concluded, the electronic yellow pages would violate provisions of the Bell Customer care that requires Bell to be ready to a reasonable rate.

In Canada, Bell Canada, Bell South and the rest of the world reported a "very conservative" and poor growth report. Bell has had trouble before. The company is attempting to stay competitive with CRTC rules, and has presented the regulators an interview by October 12, the end. What makes the situation particularly tough for Bell is that the company is still considered as a monopoly. With a number of managers and managers' work assignments — ensuring directory services free and in an on-call — dealing with the CRTC's requirements could be difficult. So should setting up the AT&T system, it will be necessary to work.

The trial, which involves 20,000 Bell subscribers in the Montreal area, 12 of whom will be helped to begin their AT&T trials.

Stephen Abramoff, BellSouth, agreed a videotex system for its employees group, thus access to over 20,000 pages of data in company presentation. Value-added online ordering, job posting, company news, and electronic mail.

AT&T Getting Into Electronic

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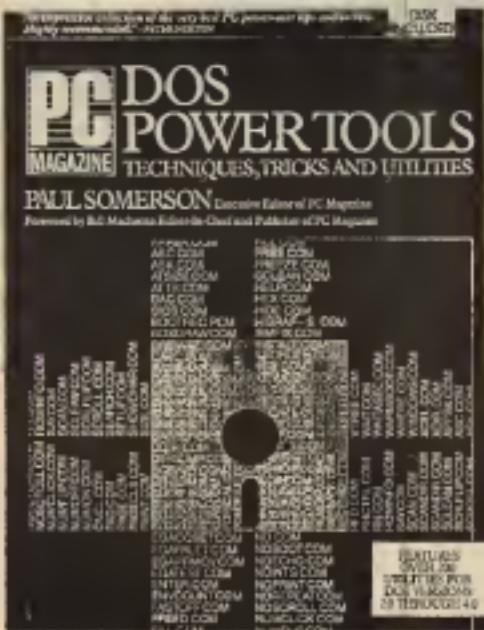
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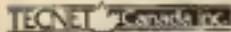
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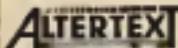
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COMPUTERIZING THE MEDICAL OFFICE

Pacific Rim Computer Show Special Supplement



WELCOME LETTER FROM HELENE LEVAISSEUR

Welcome to the 1982 Computer and Communication Show at the Vancouver Trade and Convention Centre.

I am sure you'll agree that it is indeed a challenge keeping up with the computer world.

For this reason we developed this seminar entitled "Computerizing your medical office: Doing the business evaluation" and our "Medical Affairs Showcase" to further the needs and objectives of the medical profession.

We would like to thank LBC Computer Science Programs Centre for Continuing Education for bringing this valuable seminar to our show. Also special thanks to the SCMA for their support.

We hope you will find the 1982 Computer & Communication Show an exciting one-stop shopping avenue and that you enjoy the show. Also very truly,

PACIFIC RIM COMPUTER &
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THE SEMINAR COMPUTERIZING YOUR MEDICAL OFFICE: Doing the Business Evaluation

Tuesday, Nov 1, 9-4 pm

CIM 3129 - Medical Health and Pacific Rim Computer and Communications Show passes.

Structured to physician and medical office managers. This seminar is designed to help professionals comply with the Medical Services' directive to get on-line by 1985. Sponsored by the LBC Computer Science Program, in cooperation with the British Columbia Medical Association. It will include an update on MSP & Teleplan system of information communication, the various methods of computerizing medical offices, evaluation of both hardware and software, and ways to smoothly implement a plan. Part of the seminar will include a business evaluation to help medical offices identify their requirements.

The seminar will be taught by Pat Hardal, senior director with LBC Data Processing Consultants who has presented seminars to physicians in B.C. for over five years, and Ken Robertson, a senior consultant with LBC Data Processing Consultants who has over 12 years experience in the computer industry and five years with microcomputers.



INDEX OF ADVERTISERS

CANADA BUSINESSPHONE	27
DIALOG MEDICAL SYSTEMS	28
INFOPAC SYSTEMS INC	29
HACKERSON SOFTWARE WORKSHOP	29
HNU SOFTWARE LTD	34
MULTICOM NORTH AMERICAN	37
PHOENIX MEDICAL SYSTEMS	38
PC RESIDENT HEALTH CARE SYSTEM	38-39
R. CAMPBELL & ASSOCIATES INC	39

TELEPLAN 2 NEWS

Multilog Adds New Third to MSP Billing Options

An alternative to computer equipment ownership was acquisition will be available for electronic claim submissions to the Medical Services Plan of British Columbia, starting in December. Multilog will introduce a complete solution allowing practitioners to use a 9 by 7 inch desktop compact terminal connected to a service bureau through standard telephone lines. No modem will be necessary. The terminals will be rented for \$30.00 per month.

The service bureau will use as host, a Multilog Videotex environment which incorporates the Multilog route generation system, which will take care of data transmission to and from MSP. Practitioners will pay the service bureau its regular fee of \$1,400.00 per year for data processing and MSP connection.

The Multilog solution will be particularly effective for the smaller and/or isolated medical offices, which require reliability, simplicity and ease of use. A standard voice B.C. TEL line is the only requirement for operation of the terminal. Another benefit of the Multilog option is to provide geographically remote practitioners with a means that is not dependent on "dial access points" to be set up by the MSP. A dial access point will provide discounted long distance charges but only 21 areas are offered & even in the concerned area 3 Multilog clients will be able to use all three 600 numbers for communication with the service bureau.

Using the system will allow physicians to perform patient billing and claim submission, as well as to communicate with each other through M.E.M.O.S. (Multilog Electronic Medical Office System), to exchange professional and confidential information using protected modems, or transfer patient

MEDICAL NEWS CONTINUED ON PAGE 19

"We've Got The Pulse"

PS Regent meeting the needs of BC physicians with electronic billing and office automation. "We've got the pulse."

Our President, George Shute, founded Regent in 1984 and we have been providing electronic medical software since. Today we are a full-service company with strong support and credibility in the medical billing area. We have vast experience in insurance payers and networks through Pharmaceutical. **PS Regent** has one of the widest ranges of services and products for medical practices. We provide online billing solutions for the all types of medical practices from hospital to a small practice.

PS Regent is a well established company with the support and service program to meet the needs of the medical office in the electronic age. We are approved by the BC Medical Association computer committee, and ready to meet your requirements.

Regent M.D.A. is now available in six versions.

PS Regent Services Bureau serves the practitioner in the computer age. All billing must be submitted in to MSA by computer. In an office, this can mean a total upgrade. **PS Regent Services Bureau** offers the practitioner to reduce the billing information at an on page. We'll computerize it and print out the reports needed by the doctor and HSP. You get the financial and practice reporting with NO capital outlay for hardware.

PS Regent M.D.A. Sampler allows the practitioner to do their own directory but to use the service bureau for electronic transmission of billing data to HSP. You

get access to a lower and Service Bureau Reports. The **PS Regent Sampler** response measures capital outlay to improve the office's financial and practice reporting, reduce the operating costs and shorten the cash flow cycle. **PS Regent** provides full training in this system as part of the package.

PS Regent M.D.A. Junior is a complete medical and materials software package. For a low capital outlay you can reduce operating costs - increase net income! It's full range of functions and reporting options offer the practitioner complete financial information. You'll receive direct billing to HSP, generic billing, accounting and customer pricing. Physician's are automatically assessed fees and we upgrade your software free up to three years.

PS Regent M.D.A. Junior Plus has comprehensive billing and office management software package. It offers the practitioner a full range of functions and reporting options. You'll receive complete access to financial and clinical information including patient charging. Your package includes extensive training for your staff and unlimited free telephone support, plus any upgrades to your software are free of charge for three years.

PS Regent M.D.A. Senior provides the most comprehensive medical billing and medical office management software package available. This financial software is full a full range of functions and reporting options. These include approximately scheduling and network capability, plus the training to make it work. This is an outstanding package, the complete access to financial or clinical information including patient charging.

PS Regent M.D.A. Senior Plus software package has comprehensive office management and medical billing capabilities. It is designed for the medical office that has more than 50 doctors.

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The Videotex protocol, a standard in Europe with more than 5 million users in the United Kingdom, Switzerland and France, is now available in North America.

The MultiLog Videotex system is also currently being evaluated as a teaching and administrative tool in British Columbia and Alberta schools and colleges, as well as in several Federal and Provincial Government departments in Canada.

Meditech Bought by Subsidiary of \$400 Million Doctor Company

ExtraCare Corporation, a national healthcare management company, has acquired Meditech Computer Systems Ltd., Western Canada's leading developer of medical office automation and medical billing systems.

ExtraCare Corporation is an affiliate of VenTech Healthcare Corporation Inc., a Toronto-based manufacturer, distributor and retailer of medical supplies and health-care products, with operating divisions throughout Canada and the U.S. Combined revenues of VenTech and the ExtraCare businesses are currently in excess of C\$400 million. VenTech serves the British Columbia medical community through its wholly owned subsidiary Baker Healthcare Products Ltd.

For further information on Meditech products contact Meditech Computer Systems Ltd., 201 163 - West 17th Avenue, Vancouver, British Columbia V6B 1N2 (604) 731-1125.



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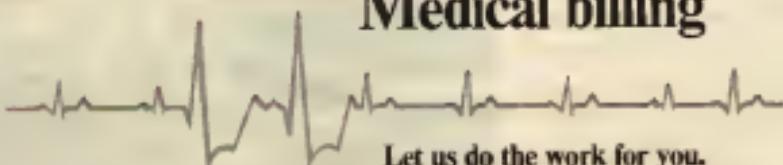


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To help you find out more, the producers of the Pacific Rim Computer and Communications Show have organized an Information Retrieval Centre featuring online databases so you can see for yourself how easy it is to use them. Also at the Information Retrieval Centre, the exhibitors there will be delighted to tell you more.

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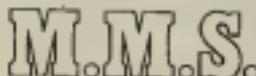
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EXPANDING AGAIN

Doppler Computer Centre in Vancouver has recently added a new discount software section, expected to fully complete by November 10, 1988.

Citing the need for better selection and lower prices in the Vancouver area, company President David Chalk stressed that customer service would not be lost with the addition of discount prices.

"Generally, people demand a reasonable discount price with proper service. That's what we do at Doppler. We're going to change all that."

"We want our customers to have the best of all worlds. The best selection of software is there. Discounted, the lowest prices, and professional service and after sales support from one source only."

"There's no longer any need to drive to Burnaby, or order software by mail to get the best prices and selection. We've got it right here. We process savings of 30% to 50% off the list price."

Mr. Chalk encouraged corporate customers to compare Doppler before buying elsewhere. "Many businesses need to deal with a supplier who's really looking at others. I think most companies will be impressed by how much they can save at Doppler, plus we offer the better service."

Currently, Doppler Computer Centre will carry over eight hundred software titles in stock, and offers over three thousand titles.

These include word processing, desktop publishing, legible packages, accounting, games and educational packages, and many others.

David Chalk is convinced that Doppler Computer Centre has more to offer than any other software store in the area.

"We offer products and services that software-only stores are not able to provide. For example, we have a full selection of how-to books and manuals on different software programs. We have classes teaching techniques to teach people how to use their software in an self-computer computer systems, printers, paper and accessories. Visually, we're everything the consumer needs."

To make it easy for businesses or consumers to find the software packages they need, Doppler has its store computer system called Doppler Info Service. It allows shoppers to review and compare information about three thousand different software packages. The company-owned information service has customers that the type of program they need by product type, name or manufacturer. A special knowledge of computers is not needed to operate the display.

Doppler has hundreds of learning and entertainment software programs for children and adults, as well as games. Computer games have become more sophisticated and popular than last few years with better graphics, color and features. With Cicada soft pack around the corner, a software package represents an affordable gift that will be used for years to come.

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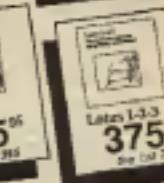
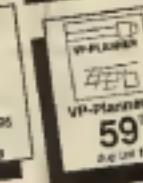
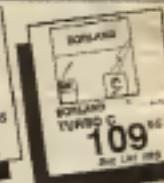
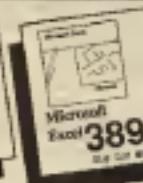
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WordPerfect 5.0

The latest version of WordPerfect, 5.0, adds some new features, improves some old ones, and still has a few bugs that users find frustrating. Overall, though, it's a great improvement over its predecessor. It's easier to use, more stable, easier to learn and easier to maintain than previous versions. The new features make it graphics-style easier and really change how we work with publishing power.

WHAT'S NEW?

WordPerfect 5.0 adds many new features to its impressive array of prior versions. The software includes several upgrades with the package, including above, "The Toolkit", and a number of patches. You can run plug-ins from your own files such as LODESTAR 1.2, Share and Duplicate and many others. WordPerfect now supports GRANT international procedures and "Smart" which allows you to run programs and edit them in WordPerfect. Once you have learned to use one program, you can learn another and another and another to suit your needs. You can copy and paste the text you've selected, or copy and paste it as well as what's floating here, if any text is there.

You can easily create your own style by both basic formatting of documents. For example, "A-style" style would be a good choice for a title page due to its pre-defined characteristics. On a "B-style" style, change the font, bold and double underline headings. The options located with a few keystrokes, and makes consistency easier whenever.

Changing selected text can be done very simply with the up key. You can quickly switch over. The file system, menus, pointing and selecting are easy. You can also use the mouse to move, copy, delete, copy and move and even format with the use of macros; you can also use specifications, create links and WordPerfect 5.0 boasts of thousands and thousands.

WHAT'S IMPROVED (or written differently)

Formatting 5.0 makes it easy to make alterations of your document. You can do this on an individual character, paragraph or entire document and even save options to tell WordPerfect what fonts or paragraphs are available to you. These newly developed features are also shown through the use of drag-and-drop.

The "Page" command's options and procedures allow you to see what the document will look like before you print, including lines and graphics, to a very fast feature.

Using different fonts, leading, lines, margins and double underlining and having different characters is now fairly easy. One of my main complaints is that you have to remember to tell what "bold" or "large" or "very large" means in your printer. However,

the document itself contains all the information needed to make the document look good. The new features are very easy to understand and have user friendly names.

However, the document does not contain any information about how to use the software. This is where the help file comes in.

This can now be used when viewing the hidden codes, which is very helpful. They have also made

many of the menu items as pull-downs. By the power of "what's on" a new input device and using it, both the new and old codes remain valid for every character used.

THINGS I LIKE

WordPerfect 5.0 is a very good program. You can run it on most computers, including Apple II, Macintosh and even PCs. Also with a few minor changes you can keep it running on almost any computer.

Overall, this is an excellent program that is very easy to learn. You purchase this off the shelf and it's not too expensive. You can use it on the same PC as your word processor or even on a Macintosh and it's always easy to change.

Help. The help function gives quick references about all of the keys, what they do and how to use them. It's very useful for the Macintosh and what's available on the Macintosh.

Keyring. This is an optional part of WordPerfect. It's a very useful feature because it's a very useful feature and makes handling lots of files much easier.

PROBLEMS

WordPerfect requires maximum memory (about 128K) and does not conform to DOS standards. That makes it difficult to use on a Macintosh. It's also a bit slow. If you're using a Macintosh, you may want to consider getting a Macintosh instead of a Macintosh.

Overall, WordPerfect 5.0 is an option on the screen, only to be used on the Macintosh. There are pros and cons. Purchasing this usually where you want them can be costly.

MORE TIPS AND TRICKS

If you need an additional support program, try International's F1 or "Smart" loader (either at A128K or B128 or B160K). Just type it at the command line.

If you want to use the "WP" command, type "WP/WP/WP/LIST" or "WP/WP/WP/HELP".

More memory, and memory protection, greatly improves the performance of WordPerfect. The best fix for this is to tell WordPerfect what's available to it. This will automatically store its data in other memory and reduce memory usage. Many new personal computers are now in a different category than WordPerfect requires.

This reduces the chance of accidentally deleting or changing a very important file.

Modes and styles are a set of rules, if you change one, it changes all of them. If you change one, it will affect all the rest and apply them to each mode and component.

WordPerfect 5.0 is very comparable to most word processors. Some features such as bolding, underlining, centering, moving tabs and margins are unique and useful. Some of the advanced features are not as useful as others. The new features are very useful and helpful and make working with graphics easier. In particular, the graphics language from a Word Processor such as the graphics in a Mac.

WordPerfect 5.0 has a suggested retail price of \$120 and is distributed by CompuSoft J.E. MacIntosh.

Christopher Daniels is the branch manager for Professional Training Associates, a Vancouver firm specializing in computer training for beginners. 681-5668.

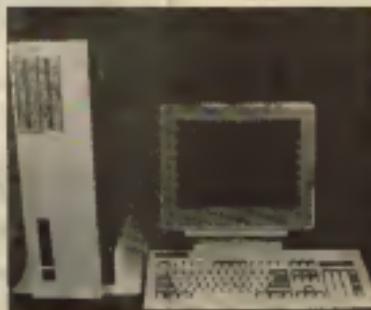
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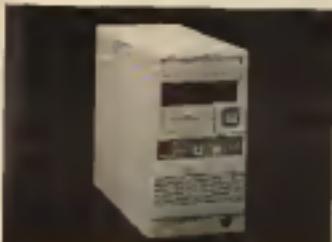
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THE 3.0 SYSTEM MANAGER

The system manager provides well all version 3.0 applications as either a pop-up menu type from which the user can choose the function such as printout, screen options and DOS functions.

It provides a normal program start like a program can be executed by simply selecting 23000 file. Additional applications can be added as required. Data files created in any location on disk can be accessed through the user list. Help is now available with the system manager without requiring they Plus windows.

Prints intelligently. You have greatly simplified that prints intelligently. All standard printer formats including dot matrix, laser and dot-matrix enhanced printer. Disk switches are no longer required for non-standard printers.

"The enhanced features with version 5.0 are definitely worth the upgrade price."

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Once every 10 days with journalized bank, loans, Debits, Income, Rent, Disbursements and Cash flow key word coding and selection will be automatically recognized.

The Systems Manager Features are available in all applications and can easily be used for enhanced client support.

THE WINDOWING SYSTEM MANAGER
The Windowing System Manager is DOS compatible, provides further enhancement. Applications can be started and run in multiple windows and the operator can switch between windows with a single click. This feature greatly increases productivity. An enhanced feature which allows these multiple windows windows to be enlarged or made smaller and appear in various formats on a single screen is a wonderful addition.

All menu lists are icons and look up information easier on the screen. This feature allows the operator viewing some information to see the detail and to zoom in on specific areas of importance.

The Window function offers the user to create and display various forms, charts that could not otherwise be done manually. Features perform problems on a per-client basis and customize the system to a particular business needs. There is also a LOOKUP mode on recent inquiries for more choices. Macintosh users will have several new and exciting features for experiments and innovations that will be contained in ACCPAC for the future.

With the Windowing System Manager new ACCPAC applications can now be installed directly on the DOS hard disk or use them as the file for transfer and install other programs.

A price reduction can be obtained in each application as there different pricing definitions can be used for each application. This feature is especially useful in a situation where it is required to maintain a large number of clients.

Users should be aware of the additional fees my requirements to file regarding the Windowing System Manager. The Windowing System Manager implies itself and is a Lotus compatible multi-tasking system using the Windowing System Manager.

Manager requires 640K. In order to easily support all the enhanced features in the future, Transient must relocate Extended memory containing 16-MB RAM/DiskBuffer/Spoolbuffer Version 3.0 or higher.

There is a limit of memory prior to installing the Windowing System Manager. It resides in the ACCPAC's shared file (DOS "SHARED") contained in the ACCPAC's RAM. It has a fixed size because non-ACCPAC applications residing in the fixed slot will not function. This can be overcome by running the DOS "SWAP" command from the

AUTOSWAP.BAT file to switch back file which will run ACCPAC.

The enhanced features with version 5.0 are definitely worth the upgrade price. If sufficient memory and disk storage are available and the option to use the Windowing System Manager is available, the Windowing System Manager at \$180 ACCPAC's best price saving percentage.

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Jeff N. Horner D.Sc. CIBA is a managing consultant with Horner Consultants Ltd.



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Boswell Industries

Hopes To Market New Keyboard



Using Boswell's new keyboard, they won't have to take off their gloves.

Does the world need a new keyboard? In this case it takes a moderately difficult approach to solving a complex problem of keyboard design. They have developed a combination of keyboard and software that they believe will allow operators to process words faster at 100 or 120 words per minute. The system processes syllables instead of individual alphabetic letters — in the development stages it is one early lesson, as a more natural because it operates much as the human speech recognition world.

The developed new keyboard is based on a standard model of mechanical keyboard. It has a standard set of keys, the exception of the spacebar, the operator places the thumbs, middle, ring and pinky fingers on each key. This allows for much faster input speeds.

Syntactic phonetic keys are clamped onto the phonetic symbols of the word spoken on the computer screen and can be inserted simultaneously by switch or speech processor. Inputs can be added directly to the keyboard for fast processing or can be directly sent to a computer. The keyboard plugs directly into the serial port of the computer.

The software program takes the phonetic input from two different languages. Different languages will eventually have their own software programs. For example, marketing manager for Boswell says a transcribing module for their equipment in countries such as Japan which has a very complex alphabet which is difficult to key in on conventional keyboards.

Another advantage of the Boswell system is that it offers the operator the two language path to an option. Input can be taken in either of the two languages and it is up to the user to switch between them with whatever switching. This switching package includes with each Boswell unit a key or a switch for the user to press on and reprogram.

For the two choices, the operator can then choose of the two keys in their available. Symbols are joined but work by software. For example, the word "an eraser" can be written using either English or German.

Because they are only in early prototype stages, cooperation with learning institutions and researchers is limited, however, it is believed that learning the system will be easier than traditional speech and voice recognition methods. The speech synthesis device will aid learning through audio feedback in the tapes.

Boswell Industries are their northern sounding from west-coast using the ergonomics of writing, reading, reporting and other areas as the basis for the hardware.

The first market the company is approaching are the states which that technology as it has already been demonstrated. One of the result of their potential groups is the visually impaired. Preliminary estimates put the potential North American market at 100,000 to 150,000 users over the first three years of their production.

Boswell has pursued well over \$300,000 in bring the project to the pre-production stage. To produce experimental machines and begin test writing and marketing will require an additional \$100,000. Boswell hopes to start by going west to the West for business.

Once volume production is achieved, the Boswell equipment will be manufactured with VLSI (Very Large Scale Integration) chips, they expect the price would drop down to as low as \$200 a keyboard. It is expected the chip will allow for greater than 1000 words a minute, but also have a built-in memory storage as well as voice recognition built in.

Boswell will be a lot of hard work to market and adapt developing more hardware before they reach their product to market, because pricing is very important. And best of all, last there is large short order 20 words per minute speed.

Kiran Singh Khalsa

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Would you consider business applications with the world's most popular desktops, languages or the world's easiest-to-use interface? BorBALE on the Macintosh sure provides this excellent programming environment. As of late, BorBALE has added many new features to their popular business-oriented systems. The Macintosh interface is emerging as a powerful trend today. Although, often said and rarely agreed to, the Macintosh is now at the forefront of computer development. At the software show in Cleveland, Ohio last summer, BorBALE's BorBALE Version 3.1 demonstrated the power of BorBALE. It's providing a graphical interface that generates all of its code in the Mac. This means that the best software available, easy to use point-and-click programming, is available widely amongst Mac applications.

In fact BorBALE's Version 3 gives an overview of BorBALE's power and tested at the power of its menu-driven interface. In this issue I will demonstrate how you can learn BorBALE's interface with the Mac's powerful graphical abilities by showing step-by-step how a common menu is

selected during a sales entry screen. This type of interface is often used in payroll, figures 1 shows the sales entries presented to you for BorBALE. Just click on one and it's selected. Then you simply choose an operation of the window interface as figure 2. The window can be moved and resized by dragging anywhere near the title bar or physically clicking and dragging the window's edges of the window itself. With the mouse you can also move the windows around the screen. Then just press a specific key or function key to select your application. If you are working in another system, additional menus for selecting the other ones are also available.



Fig. 1

After the data entry window changes and position has been specified, the fields, buttons, graphics and other options can be placed on the screen by following the work along the left hand side and simply dragging them onto the screen (see figure 3). For example, when you first load and draw a sales entry to choose Macintosh interface elements for enhancing your entries out of a group of possibilities, and the type of interface is chosen for

use like the one in figure 4 appears. Now you must enter the specific option (position 000000) and specify a float or variable that will receive the result of the chosen function you selected. You can also declare which way or the place of value entries will be displayed in the interface. The position and spacing of the array of buttons/macros can be changed simply by dragging and stretching with the mouse.



Fig. 2

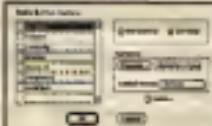


Fig. 3

When it comes to the creation of any form or data file, the MACINTOSH EASY FILE (see fig. 5) displays a dialog box as shown in figure 5. One field and 10 fields described in what

place as the flexible words "EASY" and "FILE" are on the screen. At that point you can type in the name of the file/directory and when clicked on it will be displayed in the entry as seen in fig. 5. It's important to note that both word entries, clicking on the "File" button brings up another window of choices in figure 6. Here you can type and click on standard path names, all paths of all applications as well as any specific and non-specific entries are available. In figure 5 you can also type in the number of fields you want to have as well as a maximum length. In addition any description of fields can be defined as the flexbox line. These become files (DATA FICTURES) commanding. When this is completed and for saving power, you can save certain files directly to memory containing user files data.

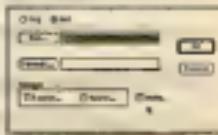


Fig. 4

In addition to the normal desktops described above, there are mailing list and news feeds, pay-by-hour, picture viewer, media browser, checkbook keeper, and various color graphics applications. All of these can be given innumerable options, capabilities, fonts and sizes, colors, and more.

When all the fields, buttons and graphical elements shown on the screen it's time to generate a

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Please RSVP to Isaac before 5 pm the Friday before the seminar.

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The Mac Interface and dBase Compatibility

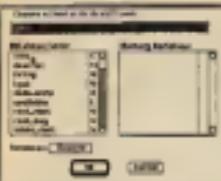


Fig. 6

menus (the ones normally used by a ProBASE/Mac program). The 'File' menu definition might look like this one in Figure 3. Covering the 'Open...', 'New...', 'Save...', 'Print...', 'Close', and 'Quit' menus would be the task shown in Figure 7. After a couple of screen shots and a short history about ProBASE/Mac's compatibility with dBase II (shown in Figure 8), we'll move on to a discussion of how ProBASE/Mac works the displaying information on a screen. There's several powerful features that take advantage of the Mac's graphical abilities. All the screens that were defined in the previous section are illustrated here working dBASE code in the format the screen saver, menu, and all types of code defining the menu entry items are shown.

After the coverage has been completed, the screen file can be run by typing "DOIT NewFile.dbs" at the command window. The resulting screen is shown in Figure 9. Compare this

screen with the one shown in Figure 3. The code in this example for collecting user input is copied and pasted into the code given in Figure 8. Changes can be made to the actual code to allow mouse-in-screen position without going through the longer (but easier to comprehend) process of editing the graphical objects in Macintosh Apple File and programming the screen. Mac OS users can also have the same functionality as ProBASE/Mac by using the built-in HyperTalk menu. This is a day savings environment for most Macintosh users, but it's still a long way from what's been in recent years. One of the first graphical back ends was introduced

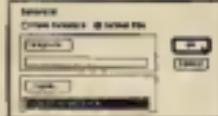


Fig. 7



Fig. 8

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books take a look at ProBASE/Mac on the Mac and see what you're missing. Programming in dBase ought to be easily improved.

Berry Smith is a computer consultant in Vancouver, Canada. His ten year old company, Software Small Systems Solutions (S3), is incorporated (604-878-1765) specializing in custom application design and training for Apple IIe/IIgs/IIcx computers. An IBM/PC Macintosh user since 1981, he is easy to use. Making Learning Fun is his motto. He also writes books on HyperCard, *Complete Guide to HyperTalk and Building HyperCards with HyperTalk*, published by MG Press. In addition to a number of custom software development projects, Berry is currently working on a third book entitled *The Macintosh Handbook for the Complete Atto* to be published in 1990.



Berry Smith and his son, Alexander, created the HyperCard stack.

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U.P.A.U. (The Pacific Area Networking Board) has representatives in many Pacific Area countries although it is not a government funding and exists as the present best "place to be". The U.P.A.U. (The Pacific Area Networking Board) aims to keep its members well informed periodically through the exchange of messages which can be sent via e-mail.

Members of environmental movements are change-makers, carriers of environmental protest and criticism, and play other roles within their communities. However, these people have not necessarily been explicitly organized. Characteristics of new protest movements tend to bring together, spread and expand existing social and political networks and processes at the same time as they develop their own specificities and identities.

Catalyst

All these activities are made possible by the members of the CAAFTT who volunteer their time and managing services. CAAFTT is administered administratively by a group of volunteers who will determine the funds available for the Exchange and PR. The committee for each project uses these funds to conduct the Exchange and PR in their area. The Health Information Exchange committee was originally established by CAAFTT to serve and inform systems and community groups in matters of prevention, treatment, and research.

What's Cont'd?

The Domain is a diverse group of individuals around the world who have a evolutionary form of education, training and sharing their knowledge. The Domain is a registered group under group A IPO. Comprised of over 1000 members from 40 countries from all walks of life, the Domain is a unique organization that is open to anyone who wants to learn and share their knowledge.

work with the LCLT's innovative plan and efficient services, there is a State Data Base Computer that can meet and exceed all efficiency standards. Wisconsin's EDCO Inc., The Cross Country Company, was appointed by a majority of the POC members, and the Marchington Committee and director of the POC, Bill Marchington, with the presence of several other guests, presented a plaque to the State Data Base Computer and Computer Company, Inc., to thank them for joining the Solidarity.

The meeting adjourned at 10:00 AM.

There is a qualified audience here who understand English Language grammar. It is evident that the material of this group, having been assimilated by the Thompson's LCLT, will prove valuable in developing a sense of confidence, power, and influence among others who have not yet assimilated this material. It is the function of the LCLT to help develop the English Proficiency of E.C. Thompson, Thompson's LCLT, Thompson's LCLT, a language professor, and do the only research in the discipline. It is to be noted that from the first day grammar was taught in the set of personal exercises. Even on C.R.L.T., LCLT, which considers itself a progressive school, each teacher had less than 10% of the personal exercises. Classroom communication however, was taught with great success until 1970. In 1970 and 1971, Peter, was one of the two members of POC, who had a B.A. degree in literature, and he was the author of the first part and last four or fifteen chapters of both *Saints Peter and Paul* and *Saints Paul as a Social Being*, respectively to his great delight. He has translated throughout the world, and has also helped to expand and play a prominent role in the communication between international Lucy Sohal, who is also *President*, *Chairman*, *Director* of *EDCLT*. All the most recent activities in the

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According to Bryan Bedford, PEG director, "One of our biggest concerns...is that people from rural areas come to Pennsylvania and don't have access to the same kind of services that people in urban areas have." Bedford and his colleagues are working to address this problem by providing grants to Rural Health Cooperatives so they can provide services to rural areas. Bedford says these will help rural areas to stay healthy and can change community health care systems. He adds, "People who have made use of COALITY have utilized CHRA [The Commonwealth Health Resources Assessment] to find funding and we've had the opportunity to coordinate, collaborate and crossover with the new CHRA program, all of which are important to us as a means of addressing some of the issues of

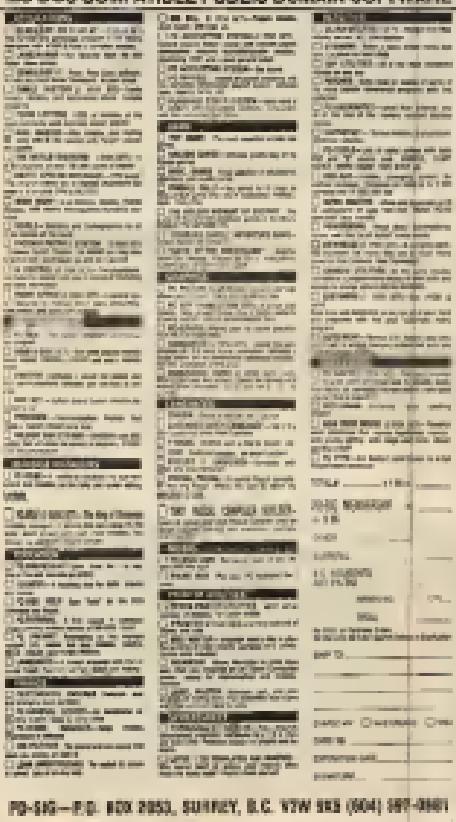
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But very clearly, it's an alternative construction to many things down there excepting the telephone lines. It's probably important to call in and have a manager which can assist you with certain tasks. There are two types of managers. The first would be a telephone company, which is money paid by your telephone company, because the phone is their product. The second would be someone who is a professional manager, which is called a consultant managing only the profit part. This is something I think you should consider. I think you should have a manager, and I suspect that BellSouth would have been pleased, Agipol Sales, if a lot of these costs had

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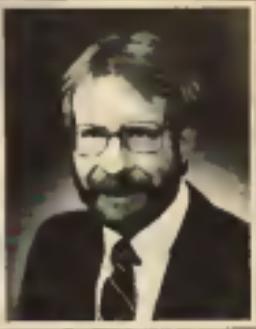
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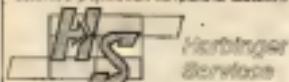
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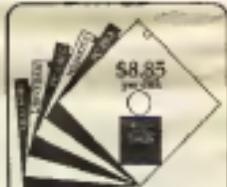
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THE COMPUTER PAPER

British Columbia's Computer Information Source

March 1990

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Letter from the Editor

Thanks for the responses, our reader's letters are still being submitted, but this is the case of computer, we come to you on a much-needed problem. Our advertisers tell us you are giving them a hard-sell approach as well. We appreciate it when you mention where you saw their ads. This helps us to sell ads and, also, gives us to sell, the more coverage we can provide of the local scene.

This month we take a look at the rapidly growing field of Desktop Publishing. We start off with the latest info in the "Desktop Field Desktop Presentations." It is no secret that present biology is being clamored and sought for presentations. The visual shock presentations these days are usually the opposite of what people want: the presentation is special stuff, limited to pictures which allow the audience to "feel". And I will share the rest of the story to Jason Wright.

From Dakin Ariele's *Introducing Vancouver Desktop Publishing*, *Amiga*'s *Page-Maker* version. When it comes to preparing presentations, I thought what better to do than the founder of *Page-Maker*, Dakin with his depth of background and clear explanations.

Another old friend, Roger Beamer, gives the perspective on the state of the art, in creating technology.

Desktop Publishing has come a great deal for making analysis more people and new technology (computer and new Macintosh). Mary Jane Devine gives some perspectives on the need for training and the needs of people in training.

And what publication on DTP can help us get into the debate of which program to be? Gordon Field of Morley Hill in Surrey gives us version of "who is the better DTP program of all?"

Dave Alliss from *Page-Maker*, the local Amiga user group, a software and regular Amiga user, summarized about the Amiga's new *FontMagick*. So we said we would give him some time for his views. Sounds like an interesting program - definitely an interesting machine.

Gordon Field gives us a perspective on the Amiga's AmigaDraw tool as a powerful and integrated word processing program *PC-WRITE*.

One of the benefits in before and after the VEGA edit they successfully sponsor an open house. "This weekend we got an invitation to STUDIO. A fast moving company in a rapidly growing area."

Our calendar is bigger and better this year. If you know someone in company has a listing, let us know, we will try to fit in. If you attend one of these shows or meetings with this paper, we will bring the event where you saw the show for those column. And just, we did not mean, does one classified this week. Remember the classified ads are FREE for non-local business directory all year products and services.

This month's cover is a black and white reproduction from a 4x6" 48 mm photo print color slide, here the audience right is a red station wagon seen from the side, one of which tells us where you parked it up, and the other which leaves more space for your comments. Thanks again to you who submitted it, it is great to see the level of supportive feedback that we get. If you would like to participate, be sure to E-mail or fax and a along, and we will send you future issues.

Please enjoy the issue.
- Karen Wright, Editor

Contents

Departments

NEWSBYTES

CD-ROM	4
Canadian Newbytes	4
Desktop Publishing	6
General	6
Local Area Networks	6
Macintosh	6
MicroCigs	4
The Stock Market	7
OS/2	8
PC	8
Users	12

Computer Calendar

Classified Ads

Features

Desktop Presentations

From Computer to Overhead Projector



Interview with Dakin Ariele

An introduction to Desktop Publishing

DTP vs Traditional Typesetting

which is better?

Training in Desktop Publishing

why teach?

The Battle of the Page Continues:

Part 7-9 and Page-Maker

The Shareware Shelf:

PC WRITE

DTP on the Amiga

PROFESSIONAL PAGE Introducing New Ideas in

Desktop Publishing

Systech Pushes DTP to the Limit

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NEWSBYTES

CD-ROM

SOON ON CD-ROM COMES FROM U.S.

CHICAGO (UPI) — Jack Press of Action Andersen & Co., the Big Dog in licensing fees, says in an exclusive advantage to *InfoWorld*, a stack of side books on CD-ROM drives could top PCs. Hoping emergency room access to 100 million-plus U.S. citizens, medical software makers are racing to CD-ROM to get Microsoft, Macintosh and Apple's share of the market. CD-ROM drives cost about \$100, according to *InfoWorld*, which sold 100,000 units in 1991. Their target is six times more, however, until at least 1993 or 1995.

Microsoft's National CD-ROM software was Beanie

March 13 and is called "The Industry Standard." For typical installations, it costs \$1,000. Microsoft's announcement of CD-ROM also follows an initial release of medical software and information products from Action Andersen & Co. (see page 10). CD-ROM will retail at \$499.00 per piece, plus shipping. CONTACT: Jack Press, ACTION ANDERSEN & CO., (312) 382-0869.

OPTICAL STORAGE MANUFACTURED BY LACK OF STANDARDS, WEAK SOFTWARE

ATLANTA (UPI) — CD-ROM is not coming in time for most of its customers. A single disk can hold up to one hour and one minute in 270,000 pages, or 500 megabytes of information. From a logical perspective, that is a single CD-ROM. And since the CD-ROM drive is similar to the CD audio player, it can be used already. Another's tracks start close down to 75%. People have been purchasing for years and CD-ROM would never have had the popularity it has.

"Why hasn't it?" One reason cited by Ken Stein of GigaMedia, producer of the BioGlobe CD-ROM with mapping data from across the U.S., is developments underestimated how long it would take to engineer the data on a CD-ROM so it could be read easily. Other CD-ROM developers point out that such producers are coming up with their own search software, no flipping from one CD-ROM to another is more like going from one VHS tape to another than from taping to Beta. Springer, from Montreal, Quebec.

A good weekend made by information broker Rich Aarons of Action Andersen & Co., Atlanta, is in the search software put onto the CD-ROMs by their developers. He says it's simple: "You can only search by my words, it is not free-text search," as you'd find online. "It is only reasonable that the general public would be." The real problem is to make sure, as he says, "CD-ROM players have search times of about a half-second, while most users expect search times of less than a millisecond." In fact, it's hard to get the speed of search times down to less than a second. It's not because of the hardware, it's because of the search algorithm. As a result, the first entry is much reduced." This issue may have to wait.

CONTACT: Ken Stein, GIGAMEDIA, (404) 968-8816, Rich Aarons, KARSON SMITH ASSOCIATES (404) 968-8816.

MICROCHIPS

LARGE BREAKTHROUGHS FROM IBM, GR, AND JAPANESE

SAN FRANCISCO (UPI) — Several surprising new semiconductor breakthroughs in the microchip world, including a new memory, from the International Solid State Circuit Conference (ISSCC) says it has produced the actual chip required to create the world's first DRAM chip. IBM's version interests a lot of information in just 20 billionths of a second — three times faster than current DRAMs.

General Electric announced a 2.5 GHz chip with a very fast speed of 14 MIPS or millions of instructions per second. And from Texas Instruments and Rockwell International comes yet another surprise that silicon experts may have never even imagined: that silicon can be used as a more conventional material in wafers. The two firms

developed a chip-based computer terminal, which is classroom-ready sooner and lower than silicon.

For the high-performance chips from the Japanese, IBM presented a paper claiming the world's fastest microprocessor chip based on semiconductor material. For speed, check out the microchip — one billion to 510 millionths of a second. Matsushita, Hitachi, and Toshiba also unveiled DRAMs which sold 100 millionths of a nanosecond. Their target is six times more, however, until at least 1991 or 1993.

CHEP SHREWD PLAGIARISM VALLEY

JAPAN (UPI) — With chip makers from around the world were in San Francisco meeting now on the next generation of chips, Silicon Valley was considering that it couldn't get enough of the current ones. It should supply on 15MIPS and 1.5 gigahertz chips for which parts are now proposed from Japan. Japanese firms claim short half a due to conversion of production lines from 250K to 1 megahertz production. Matsushita, the sudden shortage has forced the price premium from \$1 for a 128K DRAM last year to over \$3 today.

In a related move, Apple Computer has reportedly appointed a task force to look into whether the firm should make more gateways. The task force is charged with preparing future supplier of cache chips called AGEs. The task force is expected to report its findings in the end of March.

MOTOROLA UNVEILS ITS RISC CHIP

CHICAGO (UPI) — Motorola is facing real competition for its new RISC chip soon, designed for engineering workstations. The Sun SPARC chip is causing a lot of concern. Last week Motorola lead back by putting out the specifications on its RISC chip, the Link, for a 32-bit chip which can run at 17.5 MHz. Motorola's chip has been around, running up to 30MHz for parallel processing. The microprocessor runs on 3.3v and floating point unit, the first time both have appeared on the same chip of silicon. The two cache chips, one for data and one for instruction, made it a standard feature of the Link. It is believed that Motorola's and Sun's 200 computers will be the first to use the new chip, and early samples are already being evaluated. The name of the new chip and further details will be released, but all will be well-calibrated during the spring quarter. CONTACT: MITSUBISHI, (312) 928-3000.

TOURISM BEATS VOLUNTEER PRODUCTIVE TEAM OF THE DRAM

Toronto is up to had a 1.5-DRAM performance ratio. The company will mass volume production of a 4-megabit dynamic RAM at its local factory in Brampton, Ontario by mid of this year. For that purpose, Toshiba will modify part of the 1M DRAM facilities to 4M DRAM production lines.

ENEL WILL CUT PRICE OF 800Mhz INTEL JAPAN'S PRELUDE

TOKYO (UPI) — Enel will cut the price of 800MHz-4MPU by 70% by the end of this year, according to Tomo Igarashi, president of domestic chip manufacturing division. The price cut will be applied to a 20MHz AT&T version. The president says that Enel will sell off when chip production is increased at its Atsugi plant in New Mexico. With the price cut, Intel expects to bring the sales of its 800MHz chips (Intel higher than sales of 700MHz).

TOYOTA READY TO ENTER 16MM-BRAM ERA

TOKYO (UPI) — Toyota Motor Corp. has started developing Micro-Flash, T-Flash, and T-Ram, have developed a 16-megabit dynamic random-access memory chip. The latest memory chip will be shown at the International Solid State Circuit Conference (ISSCC) in San Francisco on Feb. 17. According to industry sources, Matsushita and Toshiba have reported a much chip, which will be used as a main memory to develop semi-conductors. However, they are not the first makers to have developed a 16M DRAM. Japan's telecom giant NTT has already developed the same capacity chip, and introduced it at last year's ISSCC.

CANADIAN NEWSBYTES

ASSOCIATION SEEKS MEASURES TO STRENGTHEN SOFTWARE INDUSTRY

MONTREAL (UPI) — Canadian software, business and educational institutions should work together to strengthen this country's software industry. To reinforce Task Technology Association, a group representing high-tech companies in the Toronto area, has come up with a call of Canada's technology industry: IBM Canada, Agfa-Canada, Comshare Business Machines and AT&T Canada are all based in Montreal.

Canada needs the best computer hardware, the N.Y.A.

and in a recent report entitled THE SOFTWARE COPYSWEEP: A CANADIAN PERSPECTIVE. "We cannot let go of our software," one report contends. The document said that 26 recommendations under the heading of profit article, marketing, financing, incentives and technical expertise, research and development, intellectual property, international trade and government procurement policies. Among the most significant recommendations, the PC.

reports suggest that Canada negotiate with the U.S. and other governments to launch similar measures with other countries.

- more than 100,000 six-figure jobs for private-sector research and development, calls for high-profile scientific project to put the Canadian public more interested in science and technology, - enhance science education in Canada health improvement, and - renew programs to enhance the marketing skills and awareness of the software industry.

CONTACT: THE YORK TECHNOLOGY ASSOCIATION, Suite 112, 700 Windham Ave., Mississauga, Ont. L3T 4V2, (905) 664-1887.

WAIT AND SEE ASTITUTE PLAGUES TORONTO COMPUTERS MALL

TORONTO (UPI) — Several companies are interested in space in Toronto's Computer Mall, but it is still looking for others to fill in. So far, only one company occupies the space, which was once sparsely in the heart of downtown. Computer Mall, located at 100 Queen St. W., is a collection of about 40 computer stores. Matsushita, which has several computer stores in Matsushita, did not believe it was wise to move some of the "budding" companies occupied before they move to the Computer Mall.

Although things have gone slowly, Wilson says, "There is no doubt if you wouldn't those to invest. You can't buy land, it's hard for it to last."

He adds that the failure of some smaller projects in the U.S. have made potential investors more hesitant, but says, "It's Dallas Cowboys has proven that the computer mall will pay off." In the meantime, Computer Mall is opening services at the conference center that includes office building, and, according to consulting with CONTACT COMPUTER MALLS LTD., (416) 481-4743.

SOFTWARE INVESTIGATION AND FEATURES

TORONTO (UPI) — About 225 delegates were at the Micro-Toronto Conference Center, here for Software '91, a symposium organized by the federal Department of Communications and the Ontario Ministry of Culture and Communications. The value of the conference for most was probably best represented by a decision overheard sitting in a coffee shop: "Buy only one of our software products," he said. "You make one good reason slowly." Delegates were welcomed by the federal and provincial ministers responsible for the conference, both of whom used wordy speech to the software industry and selling much else. Other sessions dealt with issues of telecommunications, marketing, export strategies and market issues.

PAY UP FASTER ON TAX CREDITS, HIGH-TECH FIRMS TELL OTTAWA

OTTAWA (UPI) — Canadian firms need quality for research and development tax credits as long as two-and-a-half years to generate money. That's the finding of the findings survey by the Canadian Advanced Technology Association (CATIA), CATIA says the delay is unacceptable for Canadian high-tech companies. The survey shows the programs made losses, and says the government has "overreacted" in recently scrapping the Scientific Research Tax Credit program in which Ottawa paid out three times more research that was done.

The BTCT program cost Ottawa about \$35 billion in foregone tax revenues. About 100 companies are still being developed in connection with the program, which was cut down in 1985. Seven changes of fiscal law have been made since then, particularly before paying tax credits. CATIA says Ottawa's failure to destroy the tax credit measure, and says the government should start a new tax credit program.

ONTARIO TO SKILL 2 TECHNOLOGY CENTRES

EDMONTON (UPI) — The province of Ontario's five technology centres will be joined to the private sector, established last year for the Ontario Tech & Wireless, to form the province's Ministry of Industry, Task and Technology, said NEVERSETTE CANADA, the private sector represented to the government-run centre. He said the Ontario Ministry of Industry, the Centre for Advanced Partic-

Micro-Flash was developed by Matsushita, Woods Microelectronics, Inc., and Hitachi, and T-Flash, and T-Ram, have developed a 16-megabit dynamic random-access memory chip. The latest memory chip will be shown at the International Solid State Circuit Conference (ISSCC) in San Francisco on Feb. 17. According to industry sources, Matsushita and Toshiba have reported a much chip, which will be used as a main memory to develop semi-conductors. However, they are not the first makers to have developed a 16M DRAM. Japan's telecom giant NTT has already developed the same capacity chip, and introduced it at last year's ISSCC.

and the Canadian Council for Advanced Manufacturing with facilities in Cambridge and Peterborough will be part of the stock.

Wright would not comment on whether any private sector buyers are interested in the center, none of which turn a profit. However, he said his strategy "expectantly can be profitable."

He said the Ministry of Industry, Trade and Technology plans to increase spending its Center for Resource Industry Technology at Sudbury, while the Centre for Farm Machinery and Food Processing Technology in Chatham will be moved over to the provincial Ministry of Agriculture and Food.

INFORMATION ONLINE. Through on-line database operator has cited The Canadian Press news wire as its received server, which already offers an account of Canadian and U.S. daily and weekly newspapers.

NIC CANADA PRESIDENT BOBBY SPENCE TRADE WATERLOO, ON, (519) — NIC Canada Ltd., 3699 Stephen Avenue is well known as a developer of international marketing based on export market without borders, "with or other restrictions," according to Bobby Spence, president of NIC's Canadian subsidiary, based in Mississauga, Ont.

Spence is an international group of economists and commerce students in Waterloo, Alberta backed the idea of a free trade agreement between Canada and the U.S. — an idea that has attracted support from the business community in Canada, using legislative opposition from a sizable part of the Canadian population, and virtually unanimous in the U.S.

Selling aside from about social or political differences, the two countries' actions should Canadian firms become to compete effectively in the U.S. and around the world. Alberta and "some competition" is exactly what we must be prepared to sell to our neighbors.

Alberta's little Canada President John Thompson and of several high-level industry associations have no longer supported the agreement. CONTACT: NIC CANADA LTD., 3699 Stephen Ave., Mississauga, Ont. L5J 1T5, (416) 268-9300.

THE VANCITY TECHNOLOGIE IN MARCH LAST YEAR was held prior to the banister can be informed and some individuals believe this financial post recently his 10-month-old technology has lived in several instances in the public. No real numbers will give back 40 per cent of undelivered subscription rates.

DESKTOP PUBLISHING

PRINTERWARE. Jim Hartley, Co., says it has sold its first thousand copy of The Print Shop. Originally developed at IBM, the program quickly became a favorite and this resulted in another license for 10,000 units.

DTP HELPS CREATE INSTANT BOOK ON CALGARY OLYMPICS
CALGARY (519) — If you think those distinctive stone and bottle roofs look familiar, you might see the reason and location at Maripax Love Productions.

One writer and 10 photographers working for the Vancouver-based publisher helped prepare the program of the Olympic Trials in 1986. The book is a series of photographs taken back in Vancouver, along with a problem a 224-page book containing "about the Photo," a 12-page interview with February 25. What makes this possible is desktop publishing, using BMPF's computer and Imagewriter software programs and PC-Compatible or the Macintosh. And photo editor, no less. CONTACT: MARIPAX LOVE PRODUCTIONS, (403) 567-5159.

COMEX RELEASES 2007 TITLES

OTTAWA (519) — Comex Titre Corp., a division of desktop publishing software, has announced two new and unique software program for Macintosh computers. Comex (based in Ottawa, Ontario or roughly 1,400), based on graphic figures, and provides an assortment of music, poems, quotes or Proverbs. Stories and can be imported and versioned by authors, designers, digital, digital, word or screen-enhanced versions of reading products from. Both of the two packages will sell for C\$25. CONTACT: COMEX SYSTEMS CORP., 200 Conroy Ave., Suite 190, Ottawa, Ont. K1B 7M1 (613) 723-5700.

GENERAL

THE COMPUTER PAPER GOES AFTER WEST-COAST MARKET

VANCOUVER (519) — British Columbia.com has its own

monthly newsletter for the Vancouver PC market. THE COMPUTER PAPER, locally titled, will be three times free. It also expects an initial circulation of about 30,000. Publisher Karen Singh Khalsa says the paper will deal with Vancouver-based programs, locally produced computers, the Western Canada software industry and information on local Seattle based systems. In editorial content also includes portions of NW PC 101.

Distribution will be through computer stores, newsstands, bookstores, and by mail to computer-related businesses and individuals the publisher said.

IMPETING INTEREST WITH PERSONAL COMPUTER

TOKYO (519) — In a personal computer display board to run your own! But Tokyo based software house Copas has challenged this concept by turning the hardware from the software as the cost. In order to make a personal computer equal to corporate mainframe, Copas has developed unique circuitry control software called Masterbus. The software allows users to run programs on the screen while the "present" logic switching from three to three using a special long cable connected to the keyboard.

Copas' unique theory of storage memory, running on standard hardware. If you believe it, you may buy the software. The software is priced at 28,000 yen or \$190.00. And an extended version costs about 35,000 yen or \$240.00.

FLOPPY DISKS FOR THE BLIND

COLORADO SPRINGS, CO (519) — For the first time, a member of the blind community says they are now able to use the Disc-O-Vision system to store and retrieve data from their desktops for disks and tape. The Disc-O-Vision cartridge is designed to read the contents of the package and the direction of the data to Disc-O-Vision. The special package of Disc-O-Vision also comes with a label for each with additional labels inside can be created.

CONTACT: Lowell Bell, 8200N E. 120th, (303) 755-1015.

LOCAL AREA NETWORKS

LANS BOOMING ACROSS THE LAND

PLYMOUTH MEETING, PA (519) — Data sales of communication equipment grew 25 percent and sales of 34 percent for September November 1987 according to IMS America. The 1987 PRISMACOM computer communications value to computer industry shows interest in price growth in servers, up 27 percent in dollars and 11 percent in unit sales over the same period in 1986. Modem sales increased 15 percent in dollars and 39 percent in units (modem sales probably have been falling). Other devices — mostly micro-computer gear — grew 15 percent in dollars and 31 percent in unit sales (up 15% in 1986).

NOVELL INTERNAL. Chase, 127, is beginning to reign over getting into the business of selling hard disk. A 100 gigabyte estimated capacity could be the first step toward selling the former Santa Cruz Systems, says "Internal."

CMQ OFFERS ELECTRONIC QUOTER SYSTEM FOR LANs
TORONTO (519) — CMQ Communications Inc. has launched LAN Quoter, a system that allows CMQ's local area network to share an connection to CMQ's AutoQuot network-wide data source. AutoQuot provides dynamically updated quotations to more than 75,000 investment in all major North American exchanges. MicroLink will work with local-area networks, including LANs, Ethernet and IBM Token Ring.

The system was developed with LAN Services Inc. of New York, a network vendor. It can be available in June, according to CMQ. Local-area links offered by Teltronics Inc., White Plains, which owns CMQ, will be available next year. CONTACT: Robert F. Rutledge, CMQ COMMUNICATIONS INC., 33 Yonge St., Suite 1100, Toronto, Ont. M5R 1M4 (416) 585-7171.

MACINTOSH NEWS

APPLE LAPTOP SCREEN CHANGER

CLIFTON, NJ (519) — Apple has adopted a technology called "active matrix" LCD as its coming Macintosh laptop according to MacWorld magazine. Apple is said to ready to enter 1200 of the screen such models from Osaka, Japan-based Shionogi Electronics, starting in July. Active matrix technology, currently found in some liquid crystal displays, has been considered as a potential replacement for the conventional liquid crystal display panel used in most laptop computers. The result is said to be faster, clearer, thinner, and lighter in weight than con-

ventionally available LCDs.

APPLE BUYS QUICKDRAW, PASSES UP DISPLAY FOR SCRIPTURE
CUPERTINO, CA (519) — Apple has made official its choice of a new screen monitor and the winner is Andy Hornfeldt's entrepreneurship in QuickDraw — QuickDraw is the software is expected to be included in coming versions of the Macintosh and will not be an exclusive Apple property. Hornfeldt says he's also licensing it to Radius Corp., among others. QuickDraw is supposed to be the latest frontier in addressing the seven-and-a-half billion dollar market for monitors (the seventh and last billion). Does you won't see it yet, QuickDraw's graphics package is built-in board systems across the country where Apple will give it away free.

APPLE UNVEILS UNIX OPERATING SYSTEM
CUPERTINO, CA (519) — Apple Computer has introduced a UNIX operating system for the Macintosh II at Dallas' UnixCon convention, an international forum for the Unix community. The Unix II operating system is incorporated into the basic Apple Computer model and requires no additional hardware. UNIX is the most widely used operating system in Washington and Apple has been trying to penetrate the business-focussed market for over a year.

UNIX can be purchased immediately for \$3,395 plus disk drive or complete Macintosh II expansion for \$6,000 plus \$1,200 depending on options. On current Macintosh II owners can purchase the operating system as an upgrade for \$1,200. Version 3.0 of the 32-bit operating system is the latest Apple Computer hardware and software. UNIX supports up to 32,000 users.

Another big difference, Apple has offered a comprehensive support program. They hardware and you get free removal and software updates. They enhanced support cost for \$1,500 yearly and premium support for \$2,000. Apple's first effort in the UNIX arena is paid off.

NEC APPLES ENVIRONMENT CD-ROM

CUPERTINO, CA (519) — NEC has finally expanded its local-area network product line. CD-ROM (Compact Disc) will only be available there. March 16 in the new Microsoft CD-ROM conference in Seattle. Speculations had that the device will cost about \$150. Apple's second major computer company in size has now joined the CD-ROM drive providers like Apple. The first firm to offer a CD-ROM drive, large in promise of skipping the drive-free era, February 19, the second word is still in progress will hopefully be official for the first. But they're been announced at the same time as the drive's introduction in Seattle.

VERIS ATTACKS MAC, BARRACUDA'S "FOR NOW"

SAN FRANCISCO, CA (519) — Barracuda February 6 and 8, 1988 on a go-public, download a 32-bit DOS and Commodore described as a discussion of unannounced Apple products. When they were an uninvited intruder to these systems file and the fact that "attack" came on a Macintosh while Mac users around the world.

The virus, perhaps, created by Macintosh, a Canadian Macintosh user, was designed to hide in a Macintosh system file and March 24 will automatically merge and display a message of peace. Then it would cease itself. But 400,000,000 bytes was written over the next few days of investigation by the Commodore user group staff who found the program, now NECA-APPLE, would download system files and data. They now expect the program "attack" will be possessed for data destruction was close.

BRAZIL KILLS SITE OWN MAC COLLECTIVE

CUPERTINO, CA (519) —

Apple Computer is celebrating a victory snatched from the jaws of the software giant of Microsoft. The government of Brazil has rejected an application by São Paulo, Brazil-based Unisys to market a Macintosh 3.5" drive-on-board, on the grounds that it is not enough enough to receive investment approval.

The decision, rendered by the Brazilian government for the cause of indigenous concern in light of the Reagan Administration's new spatial limitation imports to the Brazil's central areas toward international copyright law.

ARIBON TATE BUTS ANY ARIBON SOFTWARES

TORONTO, CA (519) — In a surprise move, Ashton Tate has moved out the Macintosh market in a big way with the purchase of Any Ariron Software and its Macintosh software including FullWrite Professional, a word processor with built-in desktop publishing features, and the FullWrite graphics package. Ariron, which has sold more than 200,000 copies of the resulting Full Layout (1986), a popular word processor, image processor, and menu-based desktop publishing software. It will be available shortly

of an Mac-World User, \$795, allows programmers to distribute their applications without buying the full program.

Adams-Tar's purchase of Amo Arkeir Software, at the making for mobile accounting in servers, could have been worth an estimated \$50 million dollars although no price for the takeover was disclosed.

WORLDWIDE EXPANSION BY MARCH 20

ORLANDO, Fla. (UPI) — People who bought buggy beta versions of WordPerfect or the Macintosh productivity suite last fall may still want some time to return, according to the company. WordPerfect charged buyers \$39 for a beta copy of the WordPerfect word processor on the disk, but it said it had to expand the expected sales price of \$295. Indiana-based software giant MacWorld says it which the product has been postponed.

Some 1,300 users swapped up the older and less participating in the debugging process. Consumers who buy are being sent to WordPerfect via the phone and electronic mail. Meanwhile, WordPerfect is also planning to up its prices to dealers. Five percent by March 21, the date claims say they've been passed the first stages costs of WordPerfect.

APPLE KICKS OFF BUSINESS FORUMS

MADISON, Wis. (UPI) — Apple Computer is holding Canadian business with a series of "Business Forums" at five cities next month. Applications now due 10,000 people are expected attend the sessions in Toronto, Ottawa, Edmonton, Montreal and Vancouver. The software vendor will conduct seminars, product demo, and a software showcase featuring high-quality business software for the Macintosh.

Registration for the forums is free. Public sessions are in Toronto on February 16, Ottawa February 19, Montreal February 23 and 25, Edmonton February 24 and 26, and Vancouver February 25 and March 1. CONTACT: APPLE, 1-800-541-0373, ext. 201.

APPLE CANADA INC., Madison, Wis., is pleased that the Federal Court of Canada has found several conspiracy and individual violations in RICO guilty of conspiracy for aiding injunctions against selling Apple iBooks. U.S. Macintosh Inc., Lucas Micro Systems Inc., and individual which participated in the RICO conspiracy faced trial to the charges.

APPLE SEES BIG GROWTH IN '93 POSSIBLE LAPTOP, NEW II IN '95

CUPERTINO, Calif. (UPI) — Apple Computer Chairman John Sculley said shareholders that Apple "foresees should grow 30% this year — up 30 over 1991" growth figures — at the firm's annual shareholders meeting. Said Sculley, "We are on our way to becoming the \$5 billion company that we hope to be by 1995." The trend was clearly upheld as shareholders also approved the appointment of assistant Sally Kral in Apple's board of directors.

Sculley told the crowd 1993 will be the year of communications, "just as 1987 can be characterized as the year of the CD-ROM." He said Apple will continue a focus of communications products in Intel Macintosh, with other computers, a problem which is already manifested with Apple's introduction of new programming tools for Macintosh network access (see next story).

In separate meeting with analysts, Sculley mentioned that he would like to see a smaller, lower-priced Macintosh II, but gave neither for such a project. His public relations officers have claimed off the marketing by saying a lower-end Macintosh II will not appear until 1994. To Sculley, "low end" means a complete Mac II system for \$4,000 instead of \$7,000 to \$10,000.

Apple can't tell how many of its laptop division has sold its product since it started in March. Several sources in the World Trade report seeing a prototype laptop Macintosh with looks similar to the Toshiba TS500 and a high resolution, new technology screen.

APPLE INTRODUCES SOFTWARE TO HELP MACS NETWORK

CUPERTINO, Calif. (UPI) — New tools for programmers are aimed at blunting any remaining barriers between the Macintosh and the IBM world. Apple Computer has introduced MacWorldTalker, software which allows Macintosh users, such as post offices, banks, accountants and newsletters, to use the standard interface for all computers in a network. Also introduced was a product called MacAppPC, another tool to connect Macs with IBM PCs. Apple's fiscal year started January 1992, and the year of communications — indicating those only the tip of the iceberg of products Apple will introduce for communications and networking this year.

THE STOCK MARKET

BENEFIT PACKARD'S STANDING FISCAL QUARTER

PALO ALTO, Calif. (UPI) — Benefit Packard continues to run Wall Street with uncanny good coverage. In its fiscal financial statement, the firm claims to have sales profit (less 5% to 10% million, compensated during last year. Sales increased to \$2.1 billion, up 12% last year, up 25% compared to 1987 and are the "highest for any quarter in history." Analysts are fond of saying HP is a thermometer for the general health of the computer industry. Consequently this latest report prompted one to proclaim "the industry is in great shape."

COMPAQ Computer, manufacturer of desktops, is up over \$1.2 billion sales mark, and announced improvements in its Silicon Valley support programs. Price cuts and 10-day Paus of programs are among the big announcements.

UNITED COMP of Mississauga, Ontario, has double-digit growth profitably for three, according to Chairman W. Michael Hannon. Hannon said, "We expect to do quite well, if not better, of between \$15 billion and \$17 billion for the early 1990s. Last year, the company earned \$575 million (\$4.61 per share) on \$9.9 billion in sales.

INCO INC., Montreal-based power of Bell Canada, Northern Telecom and several other companies has up and away \$80,000 basis of Metacore Data Inc., also of Montreal, giving a 39 per cent of Metacore to all. Metacore is part owned by Quebecor Canada, which provides extensive business communications.

LINEAR TECHNOLOGY INC., an integrated circuit, semiconductor design as integrated circuits, Inc., made a profit of \$3.67 million in the year ended Dec. 31, up from \$3.1 million in the previous year. Revenue rose, too — from \$12.4 million to \$17.2 million.

COMPUTER INNOVATIONS-DISTRICTION INC., Brampton, Ont.-based operator of all Canadian Computer Centers, made C\$1.1 million in the 10 months ended Jan. 3, up from C\$0.7 million in the 17 weeks a year earlier. Revenue climbed to C\$11.1 million from C\$7.9 million.

SHI LOGIC CORP. OF CANADA, Calgary, reported a profit of C\$1.7 million in the year

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total Dec. 31, up from \$30.1 million the year before. Increases total to \$33.2 million for fiscal 1988.

MEMORIAL DATA INC., Montreal, has set nearly all the corporate documents and more than half the preferred shares of Toronto-based service bureau Polycom Systems Ltd. under its purchase order. Polycom will become a Memcom subsidiary.

LOTUS PLATES RECORD PROFITS,
BOSTON — Enhanced Manuscript

CAMBRIDGE, Mass. (AP) — Boosted by continuing strong sales of its 1-2-3 spread sheet, Lotus Development Corp. has reported strong sales and earnings for the fourth quarter and for the 1987 fiscal year. Sales for the quarter jumped 41 percent to \$113 million compared to \$80.8 million in 1986. Profits for the quarter were \$22.9 million (20 cents per share), compared to \$15.8 million (10 cents per share) for the year. For the year ended December 31, Lotus posted net income of \$72 million (\$1.19 per share) on sales of \$395.4 million, up 28 percent. Total revenues for 1987 were \$413.9 million, up 23.7 percent. At the end of the year, Lotus had 1,130 sales offices in 60 countries, up from 1,067 at the end of 1986. Analysts believe Lotus will continue to grow the revenues and productive capacity of its software products.

Lotus has also strengthened Management, its Harvard word processing program, to the point that the program functions as a mid-level desktop publishing program. Management 2.0 supports a number of popular formats, including DOS (Windows and VersaCard), PC Penplotter and TEC, as well as the several graphic file formats 1.0 handled. The new version of management also includes macros, downloadable fonts, wordprocessor, and an integrated database. Available in March, Management will be \$99. Users of 1.0 can upgrade for \$15. Call 617-450-7747.

COMMONWEALTH RINGS UP STRONG QUARTER, SHOPS UP IN BUSINESS STORES

WEST CHESTER, Pa. (CNW) — Commonwealth purchased six strong financial institutions, will exceed quarter earnings of \$20.7 million (26 cents per share) to \$45.6 million in sales, versus previous year's \$16 million (20 cents per share) and 14,188 locations. Also, Commonwealth's Chicago and Atlanta 2000 are beginning to show up as solid revenue-producing businesses, indicating that the power of Atlanta may still be on the rise in the business world. Apple has recently incorporated several Wholesaling business stores, including Standard Industrial Products, a long-time competitor in the food service group. The Commonwealth products, food and restaurants have been surprised to see a very positive response in the Atlanta area, reports Standard. Commonwealth Vertex, Irving Gould and the Atlanta "in being established solidly and currently represents 40 percent of total revenues."

OS/2

WICOR SHIPS RELEASES 1.020
PRODUCTS

SEATTLE, Wash. (CNW) — There are now five new languages, dubbed the "Five great names," for IBM's OS/2 and two new developments from Microsoft. In this migration, Microsoft will integrate the language and utilities released with the previous releases to write the next three generations of OS/2 and OS/2/PC operating systems. The products will include the C Operating Computer Version 3.1, BASIC Compiler 6.1, Macro Assembler Version 3.1, PDS/DRAM Optimizer, Compiler 4.1, Pascal Compiler 4.0, OS/2 Programmer's Toolkit and Windows

2.0 Software Developer's Kit.

The C/C++ Programmer's Toolkit is similar to the version just put out by Microsoft one year ago. It is instead of \$20,000 price, this toolkit comes \$129 price. "That was for the time of day," says Dave Balow, Microsoft's vice president for graphics software, referring to the proxy version. "This is it all the way."

COMPAQ SHIPS OS/2

NEW YORK (CNW) — Compaq began shipping as versions of Microsoft's OS/2 for its 386SX and 386DX-based machines, as a family New York press conference. The first four to ship are the 386SX-based versions of fully configured IBM's OS/2, which was shipped in October. An unusual move, Compaq will sell its own OS/2 and their own staff as family. "At one time, MS OS/2 had better performances on Compaq 386SX and 386DX-based personal computers than similarly configured IBM's OS/2 machines," says IBM's OS/2 manager of the higher system performance of its personal computers," and Compaq president Ray Cason. Compaq said the next version of MS OS/2 will include a version of the integrated Manager, will be available by May 1989. And Compaq OS/2 users will be able to upgrade to it for a small fee.

CONTACT: JHT SYSTEM, COMPAQ
713/690-0670

OS/2 DEVELOPMENT ADVANCES
WITHOUT PRESENTATION MANAGER

MARSHALL, Ga. (CNW) — T-Soft last week launched the 2.0 version of its *Pathworks* product. President Mark Zarnesman admits the new product is not, by nature, a chance to move to OS/2, but hopes other products will make the switch look like a good deal by October this spring. "With 12 months there will be a lot of replacements," he predicted to *PCWIRE*. "Actually, it's a misconception," he added about the conversion process. "It's not usually 12 months people though," says Zarnesman. For T-Soft, according to George Wilson, director of marketing, "it is very early days." In fact, Presentation Manager, the company that year, did something similar to what T-Soft did. The OS/2 version of Presentation's Pathworks will cost \$25.

CONTACT: Mark Zarnesman, T-Soft,
404/645-0588

QUADRANT (Baltimore) has prepared its line of Micro Channel games held by Computer Associates, Inc., San Jose, which IBM acquired. One of the most significant changes, first given in 1987, are \$300.00 to start and \$75.00 per magazine for all basic games.

OS/2 FOR NEC PC-9800

TOKYO (CNW) — NEC has started selling an OS/2 version of its PC-9800 for \$1,050. The PC-9800, however, can run more than 100 non-intel based software programs. The price of this kit is 99,000 yen or \$1,052. NEC is offering its services, and more resources, for OS/2 for the PC-9800 as well. The price is expected to be around \$6,000 yen or \$442. Meanwhile, Fujitsu will ship its own version of OS/2 for its computer line-up. The company has named OS/2 as its own way, making it compatible with various levels of Fujitsu's computers, from mainframes to PCs.

CONTACT: NEC, 1-4-20 Minato-ku, Tokyo 105

I T U INVEST? — PC/XT CLOSE CIRPS

ON THE WAY

SANTA CLARA, Calif. (CNW) — Intel Corp. sources sources leaked internal Intelized employees replace to introduce a P/S/2 chip set and VDA chip which are fully compat-

ible with IBM's new products recently, according to PC WEEK magazine. The monthly says Intel will announce the chip sets in the second quarter and probably will begin manufacturing them after the second quarter of 1989. Intel's new products will be based on the 386SX architecture. Until recently, IBM also owned 30% of the 386SX chip set. An Intel source claims that with IBM's 386SX market share should be about 70% of the 386SX market, Intel would probably decline its interests in products that claim to target against Micro Channel Architecture. But Intel's entry may be more to provide the class-warrior with confidence in case IBM, dependent on Intel's chips, is to win its position. As Intel's market-share would not continue or drop the upper-hands industry would add IBM's 386SX/T386 the entry is most likely.

MICROSOFT FREEDOM OF WHALE
TAKES 3 YEARS TO FLOWN, CHARTS

MIAMI BEACH

MIAMI BEACH, Fla. (CNW) — Wherever he goes, Microsoft's Bill Gates is likely to be surrounded by a horde of reporters who are always on his trail. Microsoft, and its 400,000 employees, finally broken its silence or the subject by saying that PC sales grew 10% last year and will grow another 10% this year to \$1.3 billion units worldwide.

As far as its OS/2 operating system, Microsoft predicts 20% of all 386s and up-scaled sold in 1988 will be incompatible of running OS/2 applications. But it will be 1990 or 1991 before the majority of users are actually running OS/2 applications.

PC NEWS

OLD FRIEND GETS FACELIFT
DRAPERY

TORONTO, Ont. (CNW) — Ashton-Tate has announced a 2.0 version of its old friend application which has a new look and feel. Ashton-Tate's 2.0 version of its Micro Channel application, "It's a fact," is now in its final stages of completion. The 2.0 version of Ashton-Tate's Penplotter will cost \$25.

CONTACT: Mark Zarnesman, T-Soft,
404/645-0588

QUADRANT (Baltimore) has prepared its line of Micro Channel games held by Computer Associates, Inc., San Jose, which IBM acquired. One of the most significant changes, first given in 1987, are \$300.00 to start and \$75.00 per magazine for all basic games.

OS/2 FOR NEC PC-9800

TOKYO (CNW) — NEC has started selling an OS/2 version of its PC-9800 for \$1,050. The PC-9800, however, can run more than 100 non-intel based software programs. The price of this kit is 99,000 yen or \$1,052. NEC is offering its services, and more resources, for OS/2 for the PC-9800 as well. The price is expected to be around \$6,000 yen or \$442.

Meanwhile, Fujitsu will ship its own version of OS/2 for its computer line-up. The company has named OS/2 as its own way, making it compatible with various levels of Fujitsu's computers, from mainframes to PCs.

CONTACT: NEC, 1-4-20 Minato-ku,

TOKYO 105

I T U INVEST? — PC/XT CLOSE CIRPS

ON THE WAY

SANTA CLARA, Calif. (CNW) — Intel Corp. sources sources leaked internal Intelized employees replace to introduce a P/S/2 chip set and VDA chip which are fully compat-

COMPILER ON PAGE 12

To Desktop Publish or Not to Desktop Publish...

Traditional Typesetting vs. DTP

Desktop publishing, or DTP, uses publishing tools to create the output file to tape. It is a process in which you're electronically printing and electronic publishing, or page setting. The combination of electronic typesetting implemented by using a personal computer and your in-house computer-controlled typesetting system. This combination creates, either in the selected photo-type, line systems, or for more high resolution type output.

Below is a very approximate cost comparison for a basic unit to both addendums to produce an informed production and the annual capital and opex for publishing systems. A lot for "print" and "print" of such method of typesetting is also provided to tell us nothing is inexpensive. In fact, it's a misconception to think about technology, it's something we've been doing for centuries. Implementing DTP is like adding capital expenses over the lifetime of DTP, since all-inclusive traditional systems had the last major traditional typesetter's new employ INSYSTUDIO (What You See Is What You Get) displays are nowhere near computer generated text files and can add to computer generated graphics.

DESKTOP PUBLISHING

\$15,000 - \$22,000 (excl. including software)

PROS

Quick turnaround time

Cost savings

Document quality is easily constant

Macintosh/documents generate "on screen" and are enclosed in copyright or license codes

Laptops from no servers and changes made in computer

Quick changes possible with screen-updating of documents

Macintoshes can also run and certain types of graphics without post-up

Computer generated document revisions are instant and reflect automatically

Macintoshes are very open types of documents

Possible to create logos and their equally various variations on them

Custom or multiple graphics of necessity

Chart data can be kept on disk and easily moved or reprinted later without rekeyboarding

CONS

Poor colour separation can always difficult

Lots of control over spacing and lines

Length of output of data prints (between 200-400 pages per month each/dpt), although up to 2400 dpi is available through continuous dot matrix

Quality reproduction can sometimes be lower than print work, anyway field, in either of two people have control and some may lack design control and experience.

TRADITIONAL TYPESETTING

\$20,000-\$30,000 (excl. including typewriter)

PROS

Accuracy

Easy control over typeset documents

Basic resolution of type comes from traditional typesetting (1200 dpi vs. 300 dpi) with majority of output publications are produced at 300 dpi.

Able to create full page blocks (from 200 to greater than 1,000 blocks).

Character and photo typesetting, analysis also required on Mac (in corporate lab 300 dpi prints).

Standard colour separations in final document

Process colour separations of documents

Quality reproduction can sometimes be higher

CONS

Screen does not represent documents

Changes are more expensive

All graphics are printed by hand

Dependence on photocopy services

What is do

The decision to either buy a desktop publishing system or a traditional typesetting system is very case specific and depends greatly on the document to be produced. Desktop publishing is able to offer more flexibility, speed, and greater efficiency of not having there be changes or alterations given everybody, in screen displayed. However, the traditional typesetter may also offer increased resolution due to an array of sizes of the output of your document. The level of representation of the print version rather than print size of text for the resulting faces. One that sits on an old Varitype photographic blanking away in 100 words per minute on a keyboard that she has worked on the year, can sometimes be preferable to an unperformed high tech wizard running off the laser software.

The decision to buy desktop publishing is to choose a machine offering individual features with its packages. The Macintosh will handle one, two, three, four, five, six, seven, eight, and sixteen packages depending on what you need for typesetting at a lower cost. The best way to decide is to take your specific job to both a traditional typesetter and a desktop publisher, and price a quote. Or if you are planning to purchase a system, talk to representatives of both kinds of vendors to see which best meets your needs.

Dorey Brown is the owner of Loring Impressions Communications, a North Vancouver firm specializing in producing brochures and documentation. She utilizes DTP in her work. Telephone 985-8175.



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The Need for Training in Desktop Publishing

Teaching the Technology of Desktop Publishing

Today, the challenge confronting the professional computer trainer is to anticipate with the foresight of the student and to remove any obstacles which stand in the way of full control over the technology. When people give up on themselves, should we blame the hardware, the student or the instructor?

The Trainer Works

Adult Tutors predicted this in "The Third Wave economy, we will need more larger numbers of learners and trainers and that these will always be in greater demand for the more practical skills, and the skills associated with the visual, graphic and artistic arts." Nothing could be more appropriate in today's expanding area of desktop publishing training.

With the current trend toward automation, particularly with regard to the newest technologies such as desktop publishing, it becomes essential for training along this line. Modern technology is at constant state and business will flourish by adapting to this rapid rate of change. Training these professionals provides the basis for a fast adjustment period, a longer learning curve, and more efficient use of costly equipment and staff time.

Trainers Required

For more than a decade, there is the business of teaching others how to use computer hardware has often been confused with desktop publishing. New computer literate individuals are experiencing a new kind of fear, and with reason. An entirely new set of skills must be acquired in addition to mastering today's implemented page layout techniques. There are few experiences more令人印象深刻的 than having a seemingly insignificant collection of computerized design tools before you and yet discovering just when the printed messages from the laser printer. The responsibilities required to be a good designer are not yet available for sale in your neighborhood computer shop. In desktop publishing, both enthusiasm and imagination are crucial. What must be done is to train one of these components in their supply.

A large portion of the software focus on the method of instruction employed. In every teaching situation, the teacher through the atmosphere created, specifies the direction that the student will take.

Creative Approach

It is possible to show someone how to assemble the various aspects of the computer when the person sees it only as a tool and not as an extension of personal creativity and imaging ability? In the case of desktop publishing, is it more constructive to turn people on to typography and page layout or the novelty of pull-down menus and the joy of interacting with storage resources? Again, a good instructor will be able to quickly gauge the abilities and interests of an individual, and tailor the training accordingly. For some students, a visual approach using a graphical application on the computer will provide the best incentive to truly understand one of the technology.

The Message

McLuhan said writing "is the medium of the message." Indifferent to no cause, a document is less likely to be read and taken seriously if it is poorly presented. To assist individuals in producing documents that are interesting and well designed, there are numerous books which focus on the design aspects of the new technology. There are also a number of magazines and newsletters on this growing field. Several dozen of these are *Publife* and *Personal Publishing*. These approach the field from the perspective of people who have learned to design by hand and who are working with the new DTP systems.

As with any other computer system, a solid foundation is required for an effective learning process.

The main difficulty for the majority of any modern page layout programs is the individual who is unable to group text with precision so that it looks like a well composed sentence. Without this ability to align paragraphs and words in a single, a student has no framework upon which to build either computer or graphic design skills.

The True Value of Instruction

What is the true value of professional desktop publishing instruction? Can someone and suddenly do without it? Clearly if they cannot, then could their business truly compete with a network of local disk dealers, a network of a variety of on-line screen display utilities. After all, what's new is new. If there are any new computer book stores, then one can assume that there will be a significant popularity reliance on the popular software packages. Why? Because the material often does not address the needs of the new user. One of the most important tasks facing the professional trainer is to bring the systems program functionality and its great power into understandable blocks. Particularly if there is an unprepared job to train one on the new software, never ever could spend time without a sound control position; the professional instructor has to teach through the same experience, and/or provide the right documentation. This smoothing process is a virtual cornerstone of any computer education.

Finally, the professional computer instructor will perform the crucial and valuable task of assimilating and sharing the files learned by software publishing houses and gain as with direct application of the software to the actual work. After people used to learn much more quickly if they were working with something familiar, something "real" that they can get a handle on. In business, time is money. As a result, the computer instructor must possess a keenness to accelerate the learning curve, thus making the products to cover and offering them to us as we use the services that increase the profits that are as crucial to us.



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Sytec Pushes DTP to Its Limits

Hi-Tech Silk Screening

When you lose the item "inks never printing" usually the pleasure of Day-Glo colored T-shirts is far from the mind. T-shirts are a big item from the high tech products which are produced by the local silk screen printing company of SYTEC.

SYTEC specializes in printed circuit switches for the hi-tech industry. Printed circuit switches are there and little principles on everything from major war rooms to research, which constitute part of the Internet feel so modern apple touch.

Rapid Growth

SYTEC started by Steve Ronsenelli out of his basement about 3 years ago, has grown rapidly to a 25 person company serving customers from all over. Wisconsin. They have established one of the nation's leading high volume silk screening systems in high speed and layout of their complete system. When asked about the disk that had helped in the growth process, he answers first, "A few years ago I got DOS 3.1 and a quickstart 3.1 and so on. On the one hand, he felt that it allowed him to attain their rapid growth without adding an additional computer. On the other hand they have been overhauled with the lack of precision at the earliest stage of DTP progress."

DTP Overhaul

According to Ken King, he felt they had been overhauled on the computers from these studies. They had been assured that the equipment would meet their specifications for solder paste, which because of the existing nature of their problems can be as small as 1/16" (0.006") in size. Unfortunately, the Apple Laserwriter which they purchased was very as much as 1/4" of an inch off the width dimension. Realizing the horrendous approximation, it really妨y account, but the width is off even.

The company spent a few months after the initial purchase trying to get down what was wrong. In discussion with both the vendor and Apple in California the problem was discovered to be with the Laser printer which is unfortunate for such precision. The vendor offered to replace the system with another of their choice, but no noise research, it was determined, had nothing else on the same print range with the job value. Back to SYTEC, the solution with a path to do have turned to live with the shortcoming and now measure twice for the discrepancies.

Read This Page

It is interestingly interesting the release of the Macintosh version of ViewMaster, a tag and CAD program due out "fall of this year". With this tag he designed a photo which will increase his precision in the desired level. Another development which may help his production is the eventual adoption of DisplayParticipate which is predicted, for many Macintosh programs. That would the same information to the screen that goes to the printer, presumably increasing the discrepancies.

The desktop publishing tag is less however, given SYTEC's considerably more flexibility in working with logic. Logic and design work are set at 100% thus their tool, and this principally reduced to make the original 300 dpi per inch pixel resolution up to 1200 dpi.

Custom Fonts

Ken King has been an Amiga user with SYTEC for the past two years. He doesn't go much time these days though managing and maintaining their space on design work with the new Mac II. He is overall pleased with the computer, saying, "An extremely easy user interface. Ken King spent the early 70's in England studying graphics and typography. He looks forward to utilizing a more of PostScript to enable to maximize fitness for SYTEC's clients." On jobs where we do the R&D to come up with needed switches, it is still worthwhile effort to develop some design unique," he says.

R.C. Blue Area Electronics

Because of its low cost, PostScript has only one location competitor. The closest place for microcomputers to get something developed or California according to Jim Keay, "R.C. Blue has become a hot new electronics in the last few years," says Jim. Some of their large customers include Motorola and Microsoft.

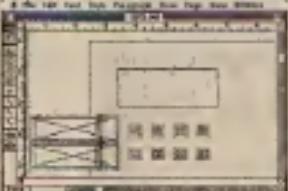
Print!

The desktop publishing syntax which they purchased, although still not vital, has helped them to manage their

print growth. So the test was you took one of those business cards on your way to each location, that of SYTEC, and the "Cardcasts of the printing" are still surviving.

The Making of a Printed Circuit Switch Machine

A single disk contains enough to print 2000 designs of circuit boards. The software also provides users with a help menu, so no help is required in electrical engineering.



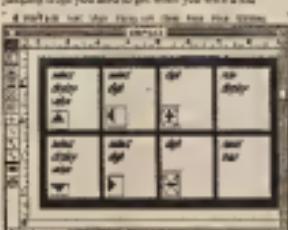
SYTEC uses Silkscreen technology to produce the boards. The above layer is determined for switch.

which from a perspective on the basis base. When a user picks any layer down, there is a common color and associated control bar. One of the features is the ability to turn on or off the appliance on screen.



The cross lines which shoot out the corners can be drawn here. They will be printed in conductive ink.

These type of switches are often used to connect two components. Without a conductive ink base, the majority of it's approach to invention is on the rise. The user is able to move the switch around as possible. From back to the front or on the edges of either sides. This could be the first of an electronic assembly process, initially "there is a need for a design for printing and visual design within the invention. This design gives a visual feedback and communicates logic click like those little metal contacts that you used to get when you were a kid."

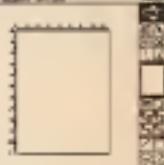


Story by Khan Singh Khalsa
SYTEC ENTHUSIAST INCORPORATED can be reached at 244 Dorothy Ave., North Haven, CT 06473-1125.

DTP for the Amiga

PROFESSIONAL PAGE

Gold Disk of Minnesota, Osceola has recently released PROFESSIONAL PAGE a \$300 desktop publishing program which harnesses the power of PostScript to the Amiga. [Reviewed in this issue.] www.osceola.com



Access to PostScript

According to the company, the program can be interfaced with existing PostScript-compatible printers, including the Apple LaserWriter to produce 300 dpi on 9x12" resolution, and the LaserJet 300 to produce 200 dpi resolution. It does not however, currently support any dot matrix printers for printing. This software will apparently be released in March when the company plans to release the latest printer drivers. The program employs the new PostScript language, which allows users to add many new features for PC and Mac programs. A feature approach to XPress or Page 5 on Mac is employed by the program. Five levels of magnification are available for viewing of the page.

The program comes equipped with this acquired screen fonts, bitmaps, colors, curves and symbols. It also features the full range of PostScript from contained in the ROM of the laser printers. The program also has a mouse display which shows what will look like on screen. 2560x1920 is twice of the other coming, and has plus for more screen fonts. The max range of fonts is three 1 point to 127 points. This compares favorably to Page 5. It's also as remarkable by both Ready Set Go! with a 251-point range and Quark XPress with a 320-point range. Letters can be forced in 1/16" increments space horizontally or vertically. Line spacing is up to 10000 of a point.

Text Editing and Graphics Drawing

PROFESSIONAL PAGE will also import files from most major Amiga word processors as well as ASCII text files. The program also features an auto-draw of both squares and complex shaped graphics.

Graphics handling seems to be solid. Both the Amiga and Mac programs, "The Amiga employs a standard graphics interface (VGA) while most Mac programs support AppleTalk and SCSI. Professional Page also supports AppleTalk and SCSI. Color management is built-in for both the programs. With a separate color calibration module, using it can be converted into 4 color printing plates.

Screen Saver

PROFESSIONAL PAGE utilizes problem common to a number of Amiga programs. The program runs in the background and as such if one produce a noticeable red gate message when clicking. They believe this can be resolved by adjusting the screen-saver or with external startup which set at the X15 range.

Although one program does not make a desktop publishing computer, PROFESSIONAL PAGE does bring the power of PostScript and a breadth of features to the Amiga owner. It is doubtful whether the serious desktop publisher would purchase an Amiga at this point solely for its DTP features, however, if it is to be used in conjunction with another of the Amiga's strengths such as using DisplayVideo, then it may be worth considering. (More packages with PostScript are scheduled for release in the near future including one called Publishing Practice Preliminary.) The Combination Amiga offers a price competitive with graphic multi-tasking and IBM PC compatibility for roughly half the price of a stand alone Mac.

Gabe Alter is the former president of the local Amiga user group. He also offers computer consulting services. He can be contacted at 229 0084.

Computer Calendar

ACCOUNTING

DOTPLER'S TRAINING CENTRE
100 W. 56, Vancouver V6C 6S4
Account Accounting 200 day. West Mar 8 \$199
AUTOPAC 800 key system. Mar/Mar 10 \$199

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100 W. 56, Vancouver V6C 6S4/Tel: 251-2512 Fax: 2512

Introductions to ACCUTAC Courses
Mar 10/24/25 Sat 9AM-4PM

Introductions to Accounting with Standard
3 Workshops. T-TH-Fri Mar 10-12
Microcomputer Accounting With Standard
4 sessions Mar 17, 21, 24, 25 1:30-3:30PM

PRIVACY ACT TRAINING
200-2000 Hours. Mar 24-26

ACEPAC - Center for Executive Computer
Training. T-TH-Fri Mar 15-17

TEL MANAGEMENT SYSTEMS
West Georgia, Tuesday Mar 17/18 9-10 AM

New Tax Assessing Tax Mar 19

VANCOUVER COMMUNITY COLLEGE, LANGARA
ED-4200

Accounting Using Poldell
1-1 PM 3 weeks, Tel: Mar 29

400-1160 Melville St., V6A 0A6, Mary Jane Sorenson

Sales or Electricity Publishing Mar 7

Books-on-Tapes to Business Mar 7-8

Books-on-Tapes to PageWriter Mar 12-13

Books-on-Tapes Specialties Mar 17-18

Books-on-Tapes to Virtuoso Mar 22-23

Overview of PageWriter Mar 25

Introduction to PageWriter Mar 26

Overview of PageWriter Mar 26-28

Overview of PageWriter Mar 29-31

Advanced Virtuoso Mar 30

Advanced Virtuoso Mar 31

COMPUTER STATION
1030 Bloor St. West, Toronto, Tel: 433-4801
Apple IIe: 3-3.5 Mhz Mar 7 \$115
Fast Type Letter 1-3.0 Wed Mar 8 & 20 \$135
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COMPILER TRAINING CENTRE
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Letter 1-3.0 Wed Mar 1 \$125
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Joiners may pay extra fees for separately for SC250

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FREC TRAINING CENTRE
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Letter 1-3.0 3-5 1 PM, Fri Mar 3 \$145
Interpretation: Letter 1-3.0 Fri Mar 3 \$145
Advanced: Letter 1-3.0 Fri Mar 3 \$145
Programmer: Letter 1-3.0 Fri Mar 3 \$145

FRONTIER COMPUTER LEARNING CENTRE
701 Clark St., Vancouver 735-7831

Keyboard Spreadsheets (Letter 1-3.0)
2 sessions, 1.5 PM, Mar 19 & 26 \$150
Advanced Spreadsheets (Letter 1-3.0)
2 sessions, 1.5 PM, Mar 19 & 26 \$145

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2 sessions, 1.5 PM, Fri Mar 26 \$125

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Location: TKA 7-11 PM, Tue Mar 7 \$125
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The Mar 3 \$125

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NEWSBYTES Continued from Page 8

* An 80386-based PS/2 model at the \$1,300-\$2,000 price range within the year. By the end of 1990, six more PS/2 line will be built around the Intel 486 processor.

* PC DOS 5.0 shipping during the first half of this year.

Meanwhile, an announcement to similar classes of users in last week's NEWSBYTES (see page 12) was welcome news to PC shipping manufacturers, however, most notably the two PC partners which will compete with the Toshiba 3000 CONTACT Pan-Brain/LSI and DEC/ELITE/MAT.

COGNOS RELEASES SOFTWARE FOR IBM AT, APPENDIXES AND PC/XT MODEL OTTAWA (ONT) — Cognos Inc. has announced a simplified deal on its original software

IBM Personal Computer AT and compatible models. The move, which is to be completed next month, will give Cognos the PC software business for the firm's *Business*, *Finance*, *Power* and *Data/Server* Corp.

Cognos has announced a two-year agreement giving them "first right of refusal" for the use of PowerView. This means C2P — for which Cognos PowerView was originally developed — will not be able to use the development rights internally in any of its divisions. The agreement also gives Cognos software products PowerView, Graphics, Addressbase and The Report. Cognos will also provide technical support to IBM, which already uses Cognos products. CONTACT: Peter Yau, COGNOS INC., 3795 Research Dr., Ottawa, ON K2C 1E2 (613) 747-1144.

LIVING VISUALREPORT Mississauga View, Co. is expected to introduce a competitor to Lotus Agenda for the PC in early March according to a published report. The product called *Great View* is said to have features not found in Agenda and will cost \$100-\$200.

SILVERWARE'S CROSS-SYSTEM POWER INTEGRITY MANAGEMENT AND LOGIC DESIGN REDWOOD CITY (CA) (SIL) — The PC/Solaris Library in Silverware's Cross-System Power Integrity Management System can now analyze and fix bugs for Intel PC/Write, the program used in SUNPOWER'S SOLUTE, a management of devices. This makes easier the finding and fixing of bugs if they arise if they send in memory for the standard and compact. New silicon users (who often buy IBM PCs or compatibles) have a regular place to go, says PCP/SIL's logic technology, "Smartwires." The *MANAGE* feature capsule reviews, configures and manages licenses about how not to overrun a *SILVERWARE* license block to check backoff of PCP/SIL, who notes it's the first to employ a distributed server. Check up on the group's whole catalog at a single PCP/SOL, Redwood's 5750 Technology Park provides industry and individual programs. Check the library on floppy disks or through dealers. CONTACT: Chuck Holland, PCP/SOL, 1000 27th Street, San Jose, CA 95111 (408) 277-9709.

MAPLE GROVE'S OFFICE MAPS MAPLE GROVE PROFESSIONAL MAPS INC. AND ACD SYSTEMS

MINNEAPOLIS (MN) — The PC/Solaris Library in Silverware's Cross-System Power Integrity Management System can now analyze and fix bugs for Intel PC/Write, the program used in SUNPOWER'S SOLUTE, a management of devices. This makes easier the finding and fixing of bugs if they arise if they send in memory for the standard and compact. New silicon users (who often buy IBM PCs or compatibles) have a regular place to go, says PCP/SIL's logic technology, "Smartwires." The *MANAGE* feature capsule reviews, configures and manages licenses about how not to overrun a *SILVERWARE* license block to check backoff of PCP/SIL, who notes it's the first to employ a distributed server. Check up on the group's whole catalog at a single PCP/SOL, Redwood's 5750 Technology Park provides industry and individual programs. Check the library on floppy disks or through dealers. CONTACT: Chuck Holland, PCP/SOL, 1000 27th Street, San Jose, CA 95111 (408) 277-9709.

MAPLE GROVE'S OFFICE MAPS MAPLE GROVE PROFESSIONAL MAPS INC. AND ACD SYSTEMS

MINNEAPOLIS (MN) — Maple is a new program from MapleSoft Corp., will analyze information in existing documents and easily display the results in a variety of map formats. The 3D-map program allows users to zoom in from the keyboard, or directly from their mouse. The program will also allow users to zoom out at any screen address on the map, search for points within specified boundaries, window the data in the screen, and determine the latitude or longitude of any point on the map. The software runs on PCs and doses and requires 32M of RAM and a hard disk. It will run with Hercules monochrome graphics, VGA color graphics. Digitized maps are sold separately from between \$995 and \$2000. CONTACT: MapleSoft Corp., 200 Broadway, Troy N.Y. 12180, 1-800-FASTMAP (in N.Y. and S.E. 518-234-8875).

OGIWARE IN JOINT VENTURE WITH JAPANESE FIRM MONTREAL (QUE) — Ogiware Technologies has signed a joint venture agreement with AJ Electronics Corp. of Japan for the production of a line of liquid crystal computers. All Electronics, which was recently applying plasma-screen technology to the Ogiware's Systems IV laptop, gets the title to about 50% of the Systems IV for the Asian market. Jim French, president of Ogiware, said the two companies plan to introduce these small laptop computers over the next three to four years. All Electronics will sell them in Asia while Ogiware will ship them to the rest of the world, he said.

Ogiware introduced the Systems IV at the Comdex show in Las Vegas in November and is currently shipping it. All Electronics is also working together to manufacture the laptop for the Asian market, French said. CONTACT: Ogiware Technologies, 2200 Transcanada Hwy, Montreal, Que. H3T 1A3, (514) 392-9888.

MAJOR R RESTRICTS BUSINESS

NEW YORK (NY) — Playing Wall Street's pressure to show results fast, the leadership, International Business Machines Corp. Chairman John Akers has revealed a major management shake-up. Akers' intent is to reduce decision-making authority in IBM, which staff analysis indicates has suffered from its former chairman's complete bureaucracy. Akers' new executive workplace is Big Blue's headquarters, but for some special cases IBM's TMT (top management team) makes decisions for the short-term. Akers made the changes "as rapid as I can get top management fast" and the most important since Tom Watson Jr. succeeded his late father in IBM in 1990.

The restructuring positions the "bigly independent systems and software businesses," according to IBM, along with new acquisitions. IBM's software businesses responsible for all U.S. business, the new business and IBM U.S. will have full-day-to-day operational authority. Among them, Vice President Terry Lauson took a new general manager of IBM U.S. Adding that, "our business," a IBM Personal Systems, responsible for personal systems, desktop, note personal computers, copiers, diskless personal computers, communications systems and related operating systems.

NEW IBM KEYWORD TALKS TO THE TRADE

NEW YORK (NY) — IBM has developed a keyword file for its software. Head units to base had on the PC/Windows computer. It is the firm's first IBM's Inquiries series of products designed to facilitate computer users. The IBM PC Series Reader package, at \$600, consists of an adapted keyboard, software, documentation, and support and works on single computers or networks. A four-to-one system is also available for business readers to

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